

Volume 2

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

Before The Honorable William H. Alsup, Judge

SONOS, INC.,)	
)	
Plaintiff and)	
Counter-Defendant,)	
)	
VS.)	NO. C 20-6754 WHA
)	Related Case No. C 21-07559 WHA
GOOGLE, LLC,)	
)	
Defendant and)	
Counter-Claimant.)	
_____)	

San Francisco, California
Monday, May 8, 2023

TRANSCRIPT OF JURY TRIAL PROCEEDINGS

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United States District Court - Official Reporter

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Alaina Kwasizur, Sonos Representative

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7:27 a.m.

P R O C E E D I N G S

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(Proceedings were heard outside the presence of the jury:)

THE CLERK: All rise.

THE CLERK: Calling civil action 20-6754, Sonos, Inc.
versus Google, LLC, and related action.

Counsel, please approach the podium and state your
appearances for the record, beginning with counsel for Sonos.

MR. SULLIVAN: Good morning, Your Honor; Sean Sullivan
on behalf of Sonos.

Would you like me to introduce the rest of the table?

Libby Moulton, Dan Smith, David Grosby, Alyssa Caridis,
Clem Roberts, and Alaina Kwasizur is our corporate
representative, Your Honor.

THE COURT: Okay. Thank you.

MR. PAK: Good morning, Your Honor, Sean Pak on behalf
of Google and with me is Melissa Bailly, Lindsay Cooper, James
Judah, our corporate representative Ken MacKay, and Iman
Lordgooei.

Thank you, Your Honor.

THE COURT: Thank you.

When the jury returns and -- in 30 minutes or so, we will
have you introduce everyone again, so they can start learning
the names.

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1 Okay. Let's start with our first -- we have a -- we ran
2 out of potential jurors last week, and I made a decision to go
3 with seven rather than eight, which leads to the question
4 whether we should stipulate to a five-person jury, if need be.
5 I have no inside information, I should tell you that, as to
6 anything that has -- you know, whether somebody has -- is going
7 to drop out or not.

8 Now, during the trial we can't have what just happened
9 here. We can't have distractions like that, so we have to
10 be -- nothing that would distract the jury anyway.

11 Let me ask Sonos first, would you stipulate to a
12 five-person jury if need be?

13 **MR. SULLIVAN:** No, Your Honor.

14 **THE COURT:** How about Google?

15 **MR. PAK:** Same, Your Honor.

16 **THE COURT:** Well, you both may live to regret it if we
17 have to have a mistrial.

18 At least in my lifetime we probably won't re-try this
19 case. It will be another judge.

20 Okay. Number two, Sonos' motion for clarification.

21 I think I understand the issue. Tell me, summarize what
22 you would like for me to clarify.

23 **MR. RICHTER:** Good morning, Your Honor, this is Cole
24 Richter on behalf of Sonos.

25 So there are two issues we would like clarification from

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1 Your Honor. So at the pretrial conference we understood,
2 Your Honor's ruling was that if Sonos attempted to introduce an
3 e-mail into evidence that contained the other patent numbers
4 that were asserted in this case, that Google would therefore be
5 able to tell the jury what happened with those patents.

6 And so, in an attempt to compromise and comply with
7 Your Honor's rulings, we would like our corporate
8 representative Ms. Kwasizur, to orally testify that she
9 provided notice of a '966 patent to Google and orally testify
10 that she provided a complaint to Google that provided
11 allegations of infringement of the '966 patent.

12 So the jury will hear nothing about --

13 **THE COURT:** Is that the one that was a few hours
14 before it was actually filed?

15 **MR. RICHTER:** It was on September 28, yes. Google
16 then, a few hours later, filed a DJ complaint, correct.

17 **THE COURT:** Well, then a few hours later you also
18 filed your complaint.

19 **MR. RICHTER:** The following day, Your Honor, correct.

20 **THE COURT:** Within 24 hours of that, quote, notice,
21 the lawsuit was underway.

22 **MR. RICHTER:** Correct.

23 **THE COURT:** All right. So you want to have a
24 verbalized statement that notice was given as to the '966?

25 **MR. RICHTER:** Correct. We think the verbal statement

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1 would avoid injury or confusion. There would be no previously
2 asserted patents in this case, so there would be no need to
3 explain to the jury what happened to those patents.

4 **THE COURT:** What's your view, Mr. Pak?

5 **MR. PAK:** Your Honor, it's the same issue that we
6 litigated last week. We -- there was no written notice prior
7 to the licensing or the draft complaint. The draft complaint,
8 itself, contained references to four other patents.

9 As Your Honor well knows, those four patents were either
10 dismissed or withdrawn from the case. We should be able to put
11 the whole story in.

12 If they don't want to mention the complaints or the notice
13 as part of that complaint, then that's one thing, but they are
14 opening the door. We should be able to tell the full story.

15 They suggested last time, Your Honor, that they redact the
16 complaint and only focus on the -- on the '966 patent.
17 Your Honor noted that that would not be permissible.

18 They do rely on this DJ complaint and oral testimony or
19 redacted form in any way, and we should be allowed to talk
20 about what happened afterwards. We still have a wolf in this
21 allegation, in this case, and we should be able to tell the
22 full story to the jury.

23 **THE COURT:** All right. What's your response to that?

24 **MR. RICHTER:** We are trying not to open the door,
25 Your Honor. We offered the redaction and we understand,

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1 Your Honor's ruling. That's not acceptable, so we are trying
2 to just tell the jury that we provided notice of the '966
3 patent, which is not in dispute. They have admitted they have
4 had knowledge of the '966 patent on September 28.

5 And we think they would be the ones introducing the other
6 patents that were previously asserted in this case, and it's
7 extremely prejudicial to tell the jury that unrelated to
8 patents directed to different technology were held in violate
9 and, frankly, they also want to.

10 **MR. PAK:** Judge Albright's ruling in Texas to try to
11 tell the jury that this patent, the '206 patent, was held
12 invalid, that is factually incorrect. Your Honor has ruled
13 that's not the law of the case. It was not held invalid.
14 That's just too prejudicial. And coupling those two things we
15 think is unfairly prejudicial.

16 **THE COURT:** Here is the ruling: If the testimony is
17 given by Alaina -- is that who it is?

18 **MR. RICHTER:** Ms. Kwasizur, Your Honor, correct.

19 **THE COURT:** Then that would open the door to what the
20 content of the notice was, and you are trying to sanitize it in
21 a way that is grossly unfair to Google. Here is what really
22 happened.

23 I won't -- I don't know if there are any members of the
24 press out there, but -- it looks like there probably is not --
25 but here is what really happened. A few hours before Sonos

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1 filed its lawsuit, Sonos sent a copy of the complaint with a
2 cover letter to the other side, to Google, saying we are about
3 to sue you. Here is your notice that you infringe.

4 And I have forgotten how many patents were listed, but it
5 was more than one. It was several. And -- and then they did
6 file their lawsuit. Sonos filed their lawsuit in Texas.

7 Now, let's put to one side for a second the declaratory
8 relief action. I'm going to come back to that.

9 The idea that a big company like Google, even a big
10 company, could find those patents, dig into them look at its
11 accused products and see whether or not it made an infringement
12 in a matter of hours is ridiculous. I will spell that if you
13 want, but it is ridiculous and it was a Sonos patent lawyer
14 gimmick.

15 Now, it is fair for the other side to come back and say
16 look how many patents they accused us of. How many was it? I
17 have forgotten.

18 **MR. PAK:** Five, Your Honor.

19 **THE COURT:** Five. They accused us of five patents and
20 within a few hours they actually sued us and is it really fair
21 for Sonos to think that we could have done our homework in that
22 period of time and come up with a conclusion whether we
23 infringe or not? Absolutely not.

24 And there was a -- it's even worse than that, because it
25 is a forest-through-the-trees problem of those patents.

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1 Several of them got withdrawn or were held invalid.

2 So Sonos served a notice that required Google to wade
3 through not only possibly invalid patents, we don't know
4 that -- or -- and/or patents that we know for sure were
5 invalid, at least according to the judge.

6 That is grossly unfair to Google. That is a gimmick. It
7 was just a gimmick. Sonos is a gimmick. So if your gimmick is
8 going to come into evidence, the whole gimmick is going to come
9 in, and then Google gets to explain what happened to every one
10 of those patents and how unfair it was for Sonos to pull that
11 gimmick. And you can call it a gimmick if you want through
12 your testimony.

13 **MR. PAK:** Thank you, Your Honor.

14 **THE COURT:** Don't say that I called it a gimmick,
15 that's not allowed, but now I'm coming though to where Google
16 shot itself in the foot. Google ran off and filed a
17 declaratory relief case under Rule 11. It could not do that
18 unless it had studied the patents. No, no. In my book that's
19 enough to go to the jury, just that alone, the declaratory
20 relief case. You don't even have to mention there's this other
21 case. So Sonos there can take advantage of the Google gimmick.
22 Both of you are gimmick officers.

23 Gimmick. Gimmick. And so Sonos can take advantage of the
24 gimmick that Google tried to pull, which is, within a matter of
25 hours, filing that declaratory relief case. And under the

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1 rules you should have known. You should know that -- you
2 should have done enough homework in good faith to say we don't
3 infringe and we don't -- and it's invalid. So, in my view,
4 both sides deserve what they are going to get here.

5 All right. So that's the ruling.

6 **MR. PAK:** Thank you, Your Honor.

7 **THE COURT:** I'm not allowing -- it's okay for her to
8 testify, but on cross-examination Mr. Pak can blow her out of
9 the water with all of these other patents and what happened to
10 them. I look forward to that cross-examination. All right.

11 Next problem. What's the next problem?

12 **MR. RICHTER:** Your Honor, I think there's one other
13 issue in that motion for clarification, actually, if I may and
14 what makes this --

15 **THE COURT:** What else is there.

16 **MR. RICHTER:** -- a unique case was, there was a
17 history of patents that Sonos --

18 **THE COURT:** The family thing, no. The family is out.
19 A family is never enough. The family is never enough to say
20 that patent hadn't even issued yet when they were studying
21 those patents, so no family. I have already ruled that the
22 family is not enough. You cannot use the family to justify
23 that they were on notice of the actual patent itself when it's
24 a complete falsehood. They were not, end of story, so don't
25 even go there. That's the ruling.

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1 **MR. RICHTER:** I think --

2 **THE COURT:** That's the ruling.

3 **MR. RICHTER:** Can I make one objection for --

4 **THE COURT:** No, you cannot. You can put it in writing
5 later.

6 **MR. RICHTER:** Okay. Thank you.

7 **THE COURT:** What's the next thing I can help you with?

8 **MS. BAILY:** Melissa Baily for Google.

9 Google has an objection to Sonos' opening slides that
10 reference certain Sonos licensing agreements, and I would like
11 to --

12 **THE COURT:** Well, what's wrong with those licensing
13 agreements? Are you objecting to the -- to the ITFF [sic], or
14 whatever it's called, and now you don't even want them to put
15 in a real licensing agreement?

16 **MS. BAILY:** I would like to explain why they are
17 relevant.

18 **THE COURT:** Please, go ahead.

19 **MS. BAILY:** Just to set the stage with respect to each
20 of those three agreements, Mr. Malackowski, Sonos' expert, has
21 stated they are not comparable to the hypothetical license, and
22 I do want to read those statements into the record just for a
23 moment, if Your Honor would permit me. With respect to the
24 lead licensing agreement, Sonos' expert says, Mr. Bakewell and
25 I -- Mr. Bakewell is Google's expert. Mr. Bakewell and I both

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1 agree that that license is not comparable to the hypothetical
2 license that would be granted in this matter.

3 With respect -- that's at page 45 of Mr. Malackowski's
4 report.

5 With respect to the Lenbrook license, Mr. Malackowski says
6 Mr. Bakewell -- and I agree -- that the Sonos' Lenbrook license
7 is not probative of the outcome of the hypothetical negotiation
8 in this case.

9 With respect to the Denon license agreement, I find the
10 Sonos-Denon agreement to not be probative of the outcome of the
11 hypothetical negotiation in this case. That's at pages 48 and
12 50.

13 And I just want to tell Your Honor why, why the experts
14 agreed these -- that these licensing agreements are not
15 relevant.

16 The first reason, the licenses are for Sonos' entire
17 patent portfolio. So both experts, for that reason, consider
18 them economically not comparable.

19 Sonos' expert doesn't apportion down from these rates that
20 are for an entire license. A rate -- sorry, that are for an
21 entire portfolio.

22 And rates for an entire portfolio are going to skew what
23 the jury is thinking is a reasonable royalty in this case,
24 which, of course, is limited to the patents.

25 **THE COURT:** Why can't they control for -- they say

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1 this is for 25 patents and then here is the particular value of
2 this '966 patent and so you -- you reduce it down to, I don't
3 know, 5 percent of the big number?

4 **MS. BAILY:** There's a few reasons.

5 First of all, they are cross-licenses, so it makes it a
6 lot more complicated. And we are going to spend a lot of time
7 on that.

8 **THE COURT:** You have to have an adjustment for the
9 cross-license.

10 **MS. BAILY:** Also, the counter-parties in those
11 agreements, they were -- leaving the speaker business and
12 aside, in reality they didn't actually pay those rates for very
13 long at all. And so we are going to be litigating that issue
14 as well, to explain to the jury why both experts said the rates
15 in these licenses were not comparable. It is going to take a
16 lot of time.

17 **THE COURT:** If we knock these out and we knock out
18 ITFF [sic] or IFTTT, if we knock that out, too, then they have
19 zero. They have no damages theory.

20 **MS. BAILY:** I don't know if that's the case.

21 **THE COURT:** How is that going to look?

22 **MS. BAILY:** Well, it's Sonos' burden, so I think
23 that's a separate issue about whether these licenses can come
24 in.

25 And the other issue that I just want to raise is if the

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1 only relevance -- the only relevance that Sonos says these
2 licenses have to this case is not for the rates. Their expert
3 said those rates were not comparable, can't rely on them.

4 The only relevance that Sonos says these agreements have
5 is to the form of the license that Sonos prefers a running
6 royalty. That's the only relevance even now Sonos says that
7 these agreements have to the case, so they are going to put
8 them in to show running royalty.

9 Google has 11 agreements non-economically comparable, very
10 low rates that show we prefer a lump sum, so we are going to
11 have a trial where there's going to be now 15 license
12 agreements that come into evidence. Witnesses are going to
13 testify about them. Both experts agree they are not comparable
14 to the hypothetical negotiation.

15 And there are going to be rates all over the place. We
16 are going to put in 11 agreements with low rates because we
17 like a lump sum. They are going to put in their three
18 agreements to say that they want a running royalty. One of the
19 three agreements isn't even a running royalty. It is a
20 sideshow. It is the -- what's the expression? -- the tail
21 wagging the dog.

22 The issue that the jury needs to decide is how much these
23 two patents are worth in a hypothetical negotiation between
24 Google and Sonos. Everyone agrees nothing about the rates of
25 these three agreements is relevant to that at all again. The

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1 only relevance Sonos says these agreements have is to the form
2 of the royalty.

3 **THE COURT:** All right. What do you say in response?

4 **MR. RICHTER:** First, Your Honor, this is a motion in
5 limine that they didn't raise. It is not fair to be bringing
6 it to Your Honor ten minutes before we are going to make
7 opening arguments.

8 She told you an incomplete picture. Mr. Malackowski does
9 rely on the licenses for the form and demonstrates Georgia
10 Pacific factor number 4, which is Sonos' past desire to enforce
11 its patent monopoly.

12 They can't come in with eight comparable licenses and hold
13 our argument hostage and say: If you bring these three in, I'm
14 going to bring in eight. And see, Your Honor, it's too much
15 for the jury. That's not fair. We only want to tell the jury
16 that we have entered into two royalty licenses.

17 **THE COURT:** But if your own guy says it's not
18 comparable, how do you get around that?

19 **MR. RICHTER:** He doesn't use it to factor into the
20 calculation of the royalty rate. He does rely on it to
21 demonstrate that Sonos prefers a running royalty. That's a
22 fair use of these licensing agreements. It's in his report,
23 Your Honor. It's just too late to be arguing this in is a
24 motion in limine.

25 **MS. BAILY:** Your Honor, first of all, this is

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1 objections to evidence, it is not a motion in limine. This is
2 what this morning is about.

3 Second of all, so you just heard that Sonos agrees or is
4 not disputing that the rates are not relevant. If they want to
5 say they have two licensing agreements that are running
6 royalty, fine, but to put the rates even when Sonos is saying
7 they are not relevant, to skew what the jury is thinking in
8 terms of valuation of two patents as opposed to thousands in
9 their portfolio, that would be wrong when Sonos isn't even
10 telling you here today that those rates are relevant to
11 anything they are saying.

12 These agreements are only relevant to the form of a
13 license so someone can say, yeah, we have entered into three
14 agreements at running royalties. Google can say we have
15 entered into 11 that are lump sums, but to get into the ins and
16 outs of 15 licenses on both sides that are not comparable that
17 the experts both agree are not comparable is 403.

18 **THE COURT:** All right. Do you want to use any of this
19 during your opening statement?

20 **MR. RICHTER:** We have a slide, Your Honor, yes,
21 concerning three licenses that Sonos entered into. We are not
22 going to talk about the royalty rates in the license, just we
23 are going to say Ms. Kwasizur is here to testify that Sonos has
24 entered into licenses with other parties.

25 **THE COURT:** That much you can say. However, I'm not

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1 going to make a ruling on whether or not they come in.
2 Ultimately, if you want to gamble and double down in your
3 opening statement and say that these are coming into evidence,
4 you may wind up being wrong, because I don't know enough, on
5 the spur of the moment, to say whether these should or should
6 not come into evidence and, if so, to what extent. But I don't
7 see there being any harm in you -- this is not like a bloody
8 picture of a traffic accident. This is patent stuff and
9 licensing stuff. It is boring. The jury will forget it in 25
10 minutes, and so it's not going to be harmful, at least the part
11 that you plan to use.

12 Now, it could be -- I wanted to say to you lawyers don't
13 say to me later, "Oh, Judge, you let us use it in the opening
14 and, therefore, it has to come in." No way. You make the
15 choice. Whenever the time comes and you want to mention it
16 with a real witness, I may say Rule 403. I may say Rule 403.
17 So, please, you are taking a chance. Maybe you shouldn't take
18 that chance. It's -- that will be up to you.

19 I don't understand enough about these particular license
20 agreements to make that call at this point, and I don't
21 understand enough about the rest of the case to make the call
22 yet.

23 It is okay for Google to raise this point now. It's in
24 the nature of a motion in limine, but that's the whole point of
25 this 30 minutes is to bring up stuff like that. So they could

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1 have made the motion and objection at the time Malackowski
2 testifies.

3 So -- that procedurally is not a correct statement.

4 Okay. So, that's my ruling.

5 All right. What else can I help you with today.

6 **MR. RICHTER:** Thank you.

7 **MR. PAK:** Your Honor, I think we have a few
8 evidentiary objections, Your Honor, that --

9 **THE COURT:** Well, here is one that's called -- this
10 one right here -- prior art. I'm ready to make a ruling on
11 this one.

12 **MR. PAK:** We resolved that issue. We fixed the title
13 on that.

14 **THE COURT:** You fixed it? So I wasted time this
15 morning going over that?

16 **MR. RICHTER:** I'm not sure what the fix is,
17 Your Honor. Can you let us know what the fix is?

18 **MR. PAK:** We are going to say "prior art obviousness,"
19 which is --

20 **MR. RICHTER:** I'm not sure that resolves it,
21 Your Honor. The issue is that there is --

22 **THE COURT:** Who did you make your agreement with,
23 Mr. Pak? I believe I have --

24 **MR. PAK:** Your Honor, we had another similar slide
25 with the same title where the issue is they didn't want us to

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1 say it was prior art 2005 system.

2 **THE COURT:** This is not prior art. This is not prior
3 art. This -- this internal e-mail from Rob Lambourne, that's
4 not prior art. It's an e-mail that may help you in some way.
5 It's not prior art.

6 **MR. PAK:** We can take out the title, Your Honor.

7 **THE COURT:** I think what you should say -- don't even
8 say Sonos 2005 system. Say 2005 e-mail, that's the title, and
9 otherwise you can use it.

10 **MR. PAK:** Thank you, Your Honor.

11 **THE COURT:** That's the answer. See, instead of
12 getting into a swearing contest over whether or not you had --

13 All right. That's the answer to that one.

14 Okay. What is the next one?

15 **MR. PAK:** Your Honor, the next issue is
16 Mr. Millington, who I believe will be the first witness on the
17 Sonos side after the openings. He has a number of exhibits
18 they disclosed to us that will be used in the direct
19 examination. Those exhibits relate to a series of meetings
20 between Google and Sonos that took place in 2013 and '14.

21 Those all relate to something called Cast for Audio, which
22 is not the accused technology in this case.

23 If Your Honor recalls, we had the other two patents
24 relating to the Cloud Q collaboration between the companies.
25 We had withdrawn our counterclaims relating to those issues.

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1 This series of meetings has nothing to do with the
2 overlapping speaker group technology at issue in this case from
3 the perspective of Sonos.

4 So it's our contention that we are now getting into a -- a
5 series of documents and meetings that have no relevance to the
6 issues in this case, number one;

7 Number two, we are not sure -- there's no copying
8 allegation, Your Honor, in this case, nor could there be
9 because Sonos has admitted that in 2020 they first released the
10 feature that practices the claimed inventions of these two
11 patents, so we think that this is confusing to the jury,
12 prejudicial, inconsistent with their view that there is no
13 copying allegation.

14 **THE COURT:** All right. What's -- there was nothing
15 filed on this, so I have no prior knowledge of this issue, but
16 let's hear from counsel.

17 **MR. RICHTER:** Let me take the prejudice -- thank you,
18 Your Honor. Let me take the prejudice first.

19 These are business e-mails between Sonos and Google. They
20 demonstrate the history of the company's relationship. They
21 are not prejudicial in any respect.

22 **THE COURT:** Were these part of the 408?

23 **MR. RICHTER:** No licensing or patents were discussed
24 in these e-mails.

25 **THE COURT:** What was the point of these

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1 communications?

2 **MR. RICHTER:** They show the parties had a relationship
3 at or around the time Google was developing the technology that
4 was involved in this case. They go to several damages issues,
5 one of which is the competitive relationship between the
6 parties. That's Georgia Pacific factor.

7 The other relevant issue is that Google, itself, has
8 raised a defense of independent development of the technology.
9 They are going to tell the jury that they developed the
10 technology before Sonos filed its continuation patents and
11 without reference to Sonos' products or anything. And I think
12 Sonos is entitled to put into evidence, hey, Sonos and Google
13 actually were talking pretty closely about this very subject,
14 multi-room audio and it was --

15 **THE COURT:** Multi what?

16 **MR. RICHTER:** Multi-room audio.

17 **THE COURT:** Counsel said that was not in these
18 communications.

19 **MR. RICHTER:** Multi-room audio is the technology at
20 issue in this case, Your Honor.

21 **THE COURT:** I know what you say, but he said that that
22 technology was not in those communications.

23 **MR. RICHTER:** The communications were concerning Cast
24 for Audio, which is the genesis for the accused products. They
25 are going to put into evidence that this was the beginning

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1 of --

2 **THE COURT:** No, no, no. Casting has almost nothing to
3 do with the multi-room thing. Where did you get that out of?

4 **MR. RICHTER:** That's the name of their audio program.
5 The accused products are called the Chromecast and the
6 Chromecast Audio. They are -- the very first accused product
7 is the Chromecast Audio product. These communications are
8 synching and grouping speakers together.

9 **THE COURT:** If you get into cast, they are going to be
10 allowed to say the Judge has already -- don't say the Judge --
11 that those have already been determined to be invalid. Haven't
12 I done that?

13 **MR. PAK:** Yes, Your Honor.

14 **THE COURT:** Yes or no?

15 **MR. PAK:** Yes.

16 **THE COURT:** Two of them.

17 **MR. PAK:** Two.

18 **THE COURT:** You get to say that if Mr. Witness --
19 don't you know what those are? So I'm going to allow you to
20 open that door. So Mr. Pak can bring that to the attention of
21 the jury.

22 **MR. RICHTER:** That's the accused products in this
23 case, Your Honor?

24 **THE COURT:** No. I'm saying that you can do it. You
25 can bring it up but he can respond because you are trying to do

PROCEEDINGS

1 another gimmick. The Cast thing is out of the case. You want
2 to bring it back in for a limited purpose, but if you are going
3 to bring it in for any purpose, Mr. Pak is going to be able to
4 blow you out of the water and say those are invalid.

5 **MR. RICHTER:** That's how their accused products work.

6 **THE COURT:** I've made my ruling. I'm letting you put
7 it to this witness, but he is going to have very much fair
8 latitude. I can't say question by question. I'm going to rule
9 fair latitude. To bring out that anything having to do with
10 cast, C-A-S-T, is invalid.

11 **MR. RICHTER:** Okay. That's even the name of the
12 accused products Chromecast Audio.

13 **THE COURT:** It's too confusing. You are trying to use
14 it as a gimmick.

15 **MR. RICHTER:** It is an accused product.

16 **THE COURT:** It is confusing. Everyone is going to
17 associate cast with this thing sending it to your TV. Sorry.
18 That's the ruling. The jury will be able to keep it straight.

19 **MR. PAK:** Thank you, Your Honor.

20 **THE COURT:** All right.

21 **MR. PAK:** I believe just a very discrete issue that
22 Mr. Judah today will be addressing on hearsay objections.

23 **THE COURT:** Yes, what's your problem.

24 **MR. JUDAH:** James Judah today for Google, Your Honor.
25 There are two issues. One is TX82385, which is a document that

PROCEEDINGS

1 was never produced in discovery.

2 **THE COURT:** Can I see it? I don't have it.

3 **MR. JUDAH:** I have copies. I will pass it up right
4 now.

5 **THE COURT:** We have four minutes, then we bring in the
6 jury.

7 **MR. JUDAH:** Your Honor, Sonos included it in the
8 binder of the key exhibits, but this document TX8325.

9 **THE COURT:** What witness is this going to come up
10 with?

11 **MR. JUDAH:** It is either Mr. Lambourne or
12 Mr. Almeroth. I'm not sure.

13 **THE COURT:** Is that the first witness?

14 **MR. JUDAH:** Mr. Millington is the first witness.

15 **THE COURT:** Is it going to come up with him?

16 **MR. JUDAH:** I don't believe so.

17 **THE COURT:** Can we do this? We will deal with it
18 before it becomes pertinent right now, unless the jury is not
19 present -- can you see if they are present?

20 **THE CLERK:** They are, Your Honor.

21 **THE COURT:** They are?

22 **THE CLERK:** They are here.

23 **THE COURT:** We are not going to waste the jury's time
24 with a hearsay problem, so we are going to get started. Are
25 you all ready for your opening statements?

PROCEEDINGS

1 **MR. PAK:** Yes, Your Honor.

2 **THE COURT:** Then we will bring in the jury and get
3 started with the opening statements.

4 While we are waiting on that, I wanted to see and have my
5 law clerk send out an order to see the materials from the
6 mala -- there was a list of materials. Is that it? Please
7 hand it over to my law clerk.

8 **MS. MOULTON:** Elizabeth Moulton for Sonos.

9 We have the sample copies of the patent that go with the
10 video. Google has said they don't want to hand these out, but
11 the video says you have been handed a sample of the patent. We
12 think it's confusing not to hand them out.

13 **THE COURT:** Yes. If it goes with the video, hand them
14 out, then collect them at the end.

15 **MS. MOULTON:** Thank you.

16 **MR. PAK:** Your Honor, would you like copies of the
17 opening statements?

18 **THE COURT:** No. No. I got too much up here already.

19 (Pause in proceedings.)

20 (Proceedings were heard in the presence of the jury:)

21 **THE CLERK:** All rise for the jury.

22 **THE COURT:** Welcome back and please have a seat.

23 Thank you, all the members of the jury, for being on time.
24 Thank you. We have all been working hard to make sure this
25 goes smoothly for you, and we are going to get started right

PROCEEDINGS

1 now.

2 So, we are going to do -- I'm going to give you a few
3 preliminary instructions, then we are going to see a video
4 about the patent process that lasts about ten minutes, and then
5 we are going to do the opening statements, and then we will get
6 started with the actual evidence in the case.

7 Okay. So that's our -- and we will stop at 1:00 o'clock
8 today. Like I promised, you will be out of here by
9 1:00 o'clock, not 1:01, no. 1:00 o'clock or maybe earlier but
10 never past 1:00 o'clock.

11 Okay. Let's call the case and allow the lawyers to make
12 their appearances again.

13 **THE CLERK:** Calling civil action 20-6754, Sonos, Inc.
14 versus Google, LLC.

15 Counsel, please approach the podium and state your
16 appearances for the record, beginning with counsel for Sonos.

17 **MR. SULLIVAN:** Yes. Sean Sullivan on behalf of the
18 Plaintiff Sonos, and with me on my team today I have Alyssa
19 Caridis, Dan Smith, Cole Richter, Clem Roberts; and we have
20 Sonos' General Counsel here, Alaina Kwasizur.

21 **THE COURT:** Thank you.

22 **MR. PAK:** Good morning, Your Honor; Sean Pak on behalf
23 of Google. And with me is Melissa Baily, Iman Lordgooei, our
24 corporate representative from Google, Ken MacKay and our
25 partner, James Judah today as well. Thank you, Your Honor.

JURY INSTRUCTIONS**JURY INSTRUCTIONS**

THE COURT: Okay. Thanks to all of you. Now, in due course, I think you will come to know the lawyers' names. Don't worry about it for now. It will -- it will -- by day 2 or 3, you will probably have the names all down, but on this side of the room is Sonos and on this side of the room is Google.

And Sonos is suing Google for alleged infringement of some patents. You will hear about that. And -- and then Google is suing Sonos for declaration that these patents are invalid, so that meaning they never should have been issued by the Patent Office in the first place.

So that's kind of what the case boils down to. If it turns out that Sonos is correct, then you will also be asked to award damages in terms of money -- a money judgment to compensate for the infringement.

Now, I'm not saying that there has been any infringement or non-infringement. That's for you to decide.

At the end of the case, I will tell you what the elements of the proof are, just like I said the other day, like to prove infringement Sonos has to prove A, B, C, and then you look to see if it has been proven. And then to prove invalidity I will say Google has to prove D, E, and F or maybe even G, and you will -- it will be your job to decide whether or not that has been proven.

JURY INSTRUCTIONS

1 So, that's the -- it will -- I will tell you at the end of
2 the case, not quite yet but at the end what the specific
3 elements of proof are. But I think as the case goes along, you
4 will get a pretty good idea of what each side is trying to
5 prove or not prove.

6 Okay. Here is the preliminary instructions. It will be
7 your duty at the end to decide who wins the case and what's
8 been proven or not proven, but it is my duty to tell you what
9 the law is and what the elements of proof are, and I will do
10 that in due course.

11 So you will be evaluating a lot of evidence. Now, what is
12 evidence? Evidence is what the witnesses say under oath. They
13 raise their hand, take an oath to tell the truth from the
14 witness stand, under oath and, importantly, subject to
15 cross-examination. That's what the evidence is.

16 Plus, there will be some documents that come into
17 evidence -- if they come into evidence. You will see some
18 documents just in the ether in here that will never come into
19 evidence, and those are not evidence -- that's not evidence,
20 but sometimes we will allow them to be used to illustrate an
21 argument.

22 So if a document comes into evidence, that's evidence. If
23 it's a picture, it comes into evidence. If it comes in, that's
24 evidence.

25 All right. What is not evidence? This is where I found a

JURY INSTRUCTIONS

1 jury can most easily go wrong, so I'm giving you a word of
2 advice of what is not evidence. What the lawyers say in their
3 opening statements and their closing arguments and along the
4 way statements and arguments to me, that is never, never, never
5 evidence. Let me put it differently. Not one word a lawyer
6 ever says in the courtroom is evidence. Not one word is ever
7 evidence unless -- unless, for example, it's a stipulation, and
8 then I will tell you it is evidence.

9 Now, so, for example, if the witness is on the stand and
10 the lawyer says, "Isn't it true that the light was red?" and
11 the witness says, "I don't know," is that evidence that the
12 light was red? No. That's just the lawyer talking.

13 Now, if the witness were to say yes to the question isn't
14 it true the light was red and the witness says yes, then of
15 course that's evidence because the witness under oath is
16 agreeing with what the lawyer said.

17 So you got to listen to both the question and the answer
18 to see how much of that is sworn to under oath and counts as
19 evidence.

20 So if you get back in the jury room, I hope that -- I will
21 give you an example. Let's say that that it was -- isn't it
22 true that the light was red and the witness says, I don't know
23 and then -- and somebody in the jury room during deliberations
24 in the jury room says, "Hey, I remember somebody said the light
25 was red." I hope one or the other of you will jump up and say,

JURY INSTRUCTIONS

1 "Wait a minute, that was just the lawyer talking. The judge
2 told us that was not evidence." And that's correct. It's not
3 evidence. It is the single easiest way for the jury to go
4 wrong is to mistake something the lawyer says as evidence when
5 it's not.

6 Now, we have excellent lawyers in this case. You see all
7 these people in the back of this room? They have come from all
8 over to see these lawyers perform because they are excellent
9 lawyers. But that doesn't mean a thing they say is evidence.
10 It's not. Zero, Z-E-R-O. Unless it's something I tell you is
11 evidence. All right.

12 Here is another thing: The second easiest way to go wrong
13 is to look something up on the internet about this case. If
14 you do that, you know what I have to do? I have to hold an
15 evidentiary hearing, put you on the stand and members of the
16 jury find out what you did. Please don't do that.

17 It's important that the case be decided on the evidence
18 here in the courtroom, not based on something off the internet,
19 not based on something your loved ones told you. So just
20 remember that. You got to decide it on the evidence here in
21 the courtroom.

22 There's -- we have this most excellent court reporter.
23 You may be thinking I don't need to take notes because we are
24 going to have a transcript. No. Actually, you won't. I wish
25 that were true, but it's not. We won't have a transcript.

JURY INSTRUCTIONS

1 This is for purposes of appeal and it is not for purposes of
2 the jury room. So you need to take notes if you want to
3 remember something, but you are not required to take notes.
4 You don't need to go through the entire trial and not take a
5 single note or you could take voluminous notes, it's up to you.
6 Do whatever is best to help your memory of what has been said
7 here in the courtroom.

8 Now, we can do at the end something called a "readback,"
9 if that becomes necessary. In other words, if you are in the
10 deliberations and you want to hear what witness X said, then we
11 can bring you back in here and we would probably have to read
12 the entirety, and that could be an entire day's worth of
13 testimony even though you may be just interested in one point,
14 but there is a law on how much we have to read back, but we can
15 get the court reporter to read back from her notes if it was
16 important for you to know that in the deliberations.

17 I want to urge you not to -- to -- to just try to keep an
18 open mind until the end of the case. Sometimes the very last
19 thing you hear is the most important thing you hear. So keep
20 an open mind just the way I know you would want to be -- you
21 would want to be treated.

22 Okay. So, are we ready to play the video about the --
23 okay. We are.

24 **MR. SULLIVAN:** Your Honor, I have those sample patents
25 that we just referred to.

JURY INSTRUCTIONS

1 **THE COURT:** All right. Would you please give it to
2 the clerk, and the clerk will hand them out.

3 Please don't write on these. This document is just to
4 help you follow the -- the thing on the screen. And what we
5 are going to do is give you a crash course in the patent system
6 because this will help you some to understand what's going on
7 in the case.

8 And now, this -- okay. Are you -- are we ready over there
9 to watch the screen? Ready? The court reporter does not have
10 to transcribe what's on the screen, of course, so let's play
11 the tape.

12 (Video was played but not reported.)

13 **THE COURT:** All right. Thank you. We are very proud
14 of that video because the judge in that -- who came from our
15 district, Judge Fogel. And after a long and distinguished
16 career here he went on to be the head of the federal judicial
17 center, and so it's also a pleasure to see that video.

18 Okay. Now we are going to switch gears. Are we ready
19 with the opening statements?

20 **MR. SULLIVAN:** Yes, Your Honor.

21 **THE COURT:** Okay.

22 **MR. PAK:** Yes, Your Honor.

23 **THE COURT:** Okay. Each side is going to have 35
24 minutes, 35 minutes, to present their opening statement.

25 Please go ahead, Mr. Sullivan.

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1 **MR. SULLIVAN:** Would you like me to collect those
2 sample patents back?

3 **THE COURT:** Oh, yes, I would. Thank you for reminding
4 me.

5 Now, while we're collecting stuff, did you lawyers still
6 want me to hand -- give out the -- that notebook that had the
7 patents in it?

8 **MR. SULLIVAN:** No, Your Honor. We have dispensed with
9 the jury notebook.

10 **THE COURT:** Okay. All right. So that's no longer an
11 issue. Great.

12 We are going to hear the opening statements. Remember,
13 none of what you hear in opening statements, even if there is a
14 document on the screen, none of it is evidence yet. Please
15 proceed.

16 **MR. SULLIVAN:** Your Honor, is it okay for fact
17 witnesses to be in the courtroom during opening? Do you have
18 an objection to that?

19 **THE COURT:** What do you lawyers want to do? It is
20 okay with me if both sides agree.

21 **MR. PAK:** It's fine, Your Honor.

22 **THE COURT:** Okay. Fact witnesses can stay for the
23 opening statement.

24 **MR. SULLIVAN:** Okay. Again, Sean Sullivan. Along
25 with my team here, we represent the Plaintiff in this case,

OPENING STATEMENT / SULLIVAN

1 Sonos.

2 First of all, let me say thank you for serving on the
3 jury. I know I speak on behalf of both sides when I say we
4 really appreciate your help resolving this dispute.

5 We are going to talk about a lot of things here over the
6 next couple of weeks. I would like to use this opening
7 statement with you to try to introduce you to some of the
8 people you are going to hear from on our side of the fight as
9 well as some of the things that they are going to say and some
10 of the evidence that they are going to cover in this case.

11 First, let's talk about who Sonos is. Okay. Sonos is an
12 American company founded in 2002 in Santa Barbara, California,
13 and they sell audio players. You can see here on the bottom,
14 here is a picture of some of the audio players, the speakers
15 that Sonos sells.

16 Sonos sells these audio players. They are designed to be
17 used in a multiroom audio system, a whole home audio system, so
18 you can put these devices in multiple different rooms around
19 your house and enjoy music throughout your whole room. Sonos
20 has also partnered with a lot of different music services. I
21 think over a hundred.

22 Some of the big names are Apple Music, Spotify, Pandora,
23 Amazon Music, those are the services that Sonos provides for
24 you to listen to the music on their speakers and their audio
25 players throughout your home.

1 Now, what's interesting about that is that Apple Music,
2 Spotify, Pandora, and Amazon Music didn't exist back in 2002
3 when -- when Sonos was founded in Santa Barbara, California.
4 Why is that relevant?

5 Well, I think it is important for us to keep in mind that
6 back when Sonos was trying to reinvent the home audio system
7 for the digital age, they didn't have a lot of the tools that
8 we have today. We have a lot of great computers and
9 electronics in the last 20 years that have been developed.
10 Sonos didn't have those.

11 So, for example, I can remember walking with my kids to
12 Blockbuster Video to rent movies. I remember in 2002 Netflix
13 was sending out DVDs in red envelopes through the mail. Okay.
14 Internet was dial-up through AOL, for instance. The iPhone
15 hadn't even been invented yet, maybe four or five years later.

16 I'm not sure all of you on the jury were born at the time
17 that Sonos was founded, 2002. So it is important, though, to
18 look back and to really appreciate the innovation, the
19 remarkable innovation that Sonos had. You need to look back at
20 that timeframe and through that lens of what the technology was
21 at the time.

22 Now speaking of innovation, the first witness you are
23 going to hear from Sonos in this case is going to be Sonos
24 Chief Innovation Officer Nick Millington.

25 Now, Nick is going to first talk to you guys about how the

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1 conventional audio system -- what it looked like back in 2002
2 when Sonos was founded, in 2003 when he first started working
3 at Sonos. Nick, by the way, was the tenth employee hired at
4 Sonos. He was there almost at the very beginning.

5 So in these conventional audio systems what you typically
6 had was a lot of wires. And you can see that here in the
7 graphic. There's a lot of wires coming out of this audio
8 receiver connected to different components and then connected
9 to passive speakers, and these passive speakers you'd have to
10 put in every room and you'd have to get wires from the
11 centralized audio receiver out to these different passive
12 speakers with all these wires to put them through the walls or
13 whatnot. It was very expensive, it was a very inflexible
14 system.

15 Now, you can see here what Sonos' vision was to kind of
16 turn that upside-down, to shift to a new paradigm instead of a
17 centralized system. Nick is going to explain for you how Sonos
18 went to a very decentralized system where he had multiple
19 ZonePlayers that were intelligent, independent, they were
20 networked, they communicated wirelessly with each other and
21 with their controller and could easily and flexibly be put all
22 throughout your house.

23 Now, this next slide we see a picture of Sonos' first
24 product. That was launched in early 2005 and Nick is going to
25 explain for you what that product was like and some of the

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1 features that it had.

2 You can see here in the picture we have the ZonePlayer
3 100. That's -- we also call that the ZP100. That's the big
4 box in the middle. And there's also a controller, dedicated
5 controller, that's called the controller 100 or we call it, by
6 short, the CR100. You will hear those terms used quite a bit
7 throughout the trial.

8 Now, the idea was, again, these ZonePlayers could be
9 placed all throughout your house in all different rooms. They
10 would communicate with each other wirelessly, as you can see in
11 this graphic. They would communicate with their controller
12 wirelessly as well.

13 So after Sonos launched its first products in 2005, they
14 were -- they received a lot of praise and recognition from the
15 audio industry. You can see here on the slide I have got a
16 sample of a few of those things but I think -- if you look at
17 this NBC news article, to me it's one of the better articles to
18 kind of sum of really the revolution that Sonos had gone with
19 this new multiroom audio system that it developed.

20 And it says here, "If you are not familiar with Sonos,
21 this company revolutionized the home audio world a decade ago."
22 If you wanted the same song in every room, no problem. The
23 tracks would be perfectly in sync. At the time this was mind
24 blowing."

25 Now, Nick is going to talk to you about some of the

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1 current products also work. So in addition to that original
2 product in 2005, Sonos now has a lot more products that it has
3 developed over the years. You can see in the top left-hand
4 corner these are speakers. These are all-in-one devices where
5 the speaker drivers are built into the ZonePlayer. They also
6 have some home theater products on the right. The components
7 down in the bottom left, those are upgraded versions of what
8 you saw with the ZP100, that initial ZonePlayer.

9 And the hardware controller now has been replaced with an
10 app that you can use on a smartphone, so it is the Sonos app
11 that can be used to control the speakers in your home.

12 Now, Nick is also going to talk about some of the
13 competition that Sonos had over the years.

14 When Sonos first came out in 2005, there really was no
15 competition. Again, the traditional audio systems were doing
16 something completely different. They were stuck with their AV
17 receivers, centralized, with all these wires coming out to
18 these different passive speakers.

19 So Sonos lived in the marketplace for a long time without
20 any really significant competition, almost ten years. And it
21 wasn't until about 2014 that some traditional audio companies
22 started to enter the market, started to copy and mimic what
23 Sonos was doing, getting rid of their centralized wired
24 systems. And you can see two examples here in this timeline,
25 Bluesound and the Denon Heos. Those were the first two entries

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1 into this market.

2 And then, eventually, big tech came into the same field.
3 You have Google starting to compete with Sonos in 2015, over
4 ten years after Sonos launched its first product. Then you
5 have Amazon and then followed by Apple. So big tech is in the
6 game now, too, not just the traditional audio companies.

7 All right. So we're going to talk about some key points
8 throughout this trial. The first one, obviously, is we are
9 going to start with the patents.

10 So, you are going to hear from Rob Lambourne. He is the
11 director of user experience at Sonos. He is employee No. 14 of
12 the company, and he is also the inventor on the two patents in
13 this case.

14 On the left you see the '885 patent, and on the right you
15 see the '966 patent. We refer to those patents by their last
16 three numbers.

17 Now, Rob is going to explain to you how the '885 covers
18 zone scene technology, but it does so from the perspective of
19 the audio player. That would be the ZP100, for instance.

20 He is also going to explain how the '966 patent covers
21 zone synch technology but from the perspective of the
22 controller, so that would be an app on the phone, for instance,
23 or, in the older days, it was the CR100.

24 Now, there are lots of drawings, lots of description in
25 these patents. I'm not going to try to tackle all of that with

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1 you right now during this opening statement, but I pulled out a
2 figure from the patent, it's figure 6. And, by the way, these
3 two patents are what we called "related patents." they share a
4 common specification. So all the detailed description the
5 drawings are the same. When you see the patents, you will know
6 what I mean. But, again, they just cover it from different
7 perspectives with respect to the claims.

8 All right. So figure 6 of the patent I have up here, it
9 shows that zone scenes are broken up into two phases. So zone
10 scene grouping has a first phase that's setup and has a second
11 phase that's invocation.

12 Now, in the setup phase what you are doing is you are
13 selecting the speakers in your house that you want to put into
14 a zone scene.

15 You will then name those according to a common theme, like
16 "morning." You give the zone scene a name, and then you will
17 save that zone scene. But you won't invoke it yet. That's in
18 a different step. It's a different phase.

19 And the reason that's important is if you look at the old
20 system, the original system that Sonos had 2005, the grouping
21 that they used in that system was what we called "dynamic
22 grouping." So it's grouping speakers on the fly. So if you
23 want two or three speakers grouped together, you would select
24 those three speakers, you would group them and invoke them all
25 at the same time. It was an immediate response.

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1 Here, in zone scenes you create the group, you save it as
2 a zone scene and then you invoke it in the future. That's the
3 difference between the different grouping functions that the
4 original products had and that Sonos' current -- more current
5 implementation has and what the patents have, zone scene
6 technology.

7 And let's take a look at Sonos' current implementation of
8 zone scenes, and I can kind of explain a little bit more on how
9 this whole zone scene technology works.

10 On the left-hand this is the controller app on a phone.
11 On the left-hand side it says "create group" at the top, and
12 then you see three speakers that are available. We've got
13 kitchen and underneath that hand it says "living room" and
14 "master bedroom."

15 Now, suppose we want to select the kitchen and the master
16 bedroom but not the living room, so we select those. We press
17 on those plus buttons, okay? Those are added to the group. We
18 name the zone scene with a theme like morning and we save that,
19 save that zone scene.

20 So now you have done the first step. You have set up the
21 zone scene morning, which includes the member's kitchen and
22 master bedroom.

23 Now, I apologize on this graphic it shows the kitchen on
24 the second floor. I don't know of a house that has a kitchen
25 on a second floor, but if you can forgive me for that mistake,

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1 I appreciate it. The thing you can do here, too, is, you can
2 create another zone scene. You can create multiple zone
3 scenes.

4 So, for instance, you can create a second zone scene.
5 This time you are going to select the kitchen and the living
6 room and you are going to call that or name that under the
7 theme "evening," and you are going to save that as a zone
8 scene. Again, not invoking them yet, but just saving them.

9 So the important thing to recognize here is that you have
10 two different zone scenes, right, evening and morning, and you
11 have one speaker, the kitchen speaker, that lives as a member
12 of both of these zone scenes.

13 That's what we will refer to, you will hear throughout, as
14 an overlapping group. There is one zone scene that's in two
15 different groups. And why is that important? Well, in the
16 dynamic grouping scenario for the original products that wasn't
17 possible. You could only be a member of one group at a time.
18 But it is possible here because, again, invocation hasn't
19 happened.

20 All right. So, again, going back to the patent, figure 6.
21 We kind of covered this box up here on setup. That's the first
22 phase. Let's talk about the invocation phase, the second
23 phase.

24 So here you can see on the left, again, our controller
25 app. We have evening and morning. Those are our two available

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1 zone scenes. You can press morning to invoke that zone scene.
2 And what will happen is you have now formed this group. You
3 have now invoked this group, I should say, with the kitchen and
4 the master bedroom.

5 Now, the kitchen is still part of the evening zone scene,
6 so that doesn't change, because that's an uninvoked group,
7 but -- but you have here the kitchen and the morning have now
8 been invoked and, again, that's the second phase of the zone
9 scenes, as you can see here in figure 6 of the patent.

10 Next key point, Google infringes. Now, it's important to
11 remember in this case, and I believe Your Honor instructed you
12 or informed you last week that the '885 patent has found to be
13 infringed by Google's prior versions. Okay. So the Court has
14 already found that Google's prior versions infringe claim 1 of
15 the '885 patent. You do not need to decide that.

16 Now, what that means is -- I have got a picture here of
17 claim 1 from the '885 patent -- you can see all of these
18 elements. And I'm not going to bore you with all the details
19 of all these elements right now, but what that means is that in
20 order to infringe claim 1 of the '885 patent, every single one
21 of these elements was found to be in the prior versions of
22 Google's product. You can see the checkmarks representing
23 that.

24 All right. So Google got their hand caught in the cookie
25 jar. Now they have to figure out a way to get out of this

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1 mess. So they have come up with some excuses on why they
2 should be allowed to get out of their infringement.

3 What's the first excuse? We don't infringe at least the
4 other patent.

5 Second excuse? Well, we do it different now. The third
6 excuse? Well, the patents are invalid.

7 And the last excuse? Well, the patents are not worth
8 anything, they are not valuable.

9 I think the evidence in this case will show you that none
10 of those excuses hold water.

11 So, the next person you are going to hear from Sonos is
12 going to be Dr. Kevin Almeroth. He is a Ph.D. from Georgia
13 Tech. He is a very well-respected professor in computer
14 networking, which is perfect for this case. Again, in this
15 case we are dealing with smart speakers, intelligent, network
16 devices.

17 Now, Dr. Almeroth is going to walk through the
18 infringement issues with you. He doesn't need to walk through
19 the infringement of the prior versions with respect to the
20 claim 1 of the '885 patent, but he is going to work through how
21 the new versions of Sonos' products also infringe claim 1 of
22 the '885 patent. He's also going to walk through the evidence
23 to show you how both the prior versions and the new versions of
24 Google's products infringe the '966 patent claims, 1, 2, 4, 6
25 and 8.

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1 Now, as Dr. Almeroth does that, again, he's going to do
2 the same analysis that I showed you before. Here is a picture
3 of the claim 1 of the '966 patent. Dr. Almeroth is going to
4 walk through how each one of these claim elements is found in
5 Google's current and prior versions.

6 That's what these checkmarks represent. They are all
7 there; therefore, they infringe.

8 Now, let's look at Google's second excuse here -- sorry
9 yeah, first excuse -- noninfringing alternatives. What this
10 is, is really Google saying we've come up with some potential
11 redesigns.

12 Well, in order for this excuse to be valid, that redesign
13 has to be two things. It has to be noninfringing, and it has
14 to be commercially acceptable. What does commercially
15 acceptable mean? That means users are going to want to use it.
16 It can't be garbage, it can't be junk. It has got to be
17 something that the market will adopt.

18 The evidence is going to show you in this case that the
19 redesigns that Google is proposing are either still infringing
20 or they are not commercially acceptable or in some instances
21 both, so that excuse doesn't hold water.

22 Now, the next thing they are going to try is to say that
23 the patents are invalid. Now, we will get into this later in
24 the jury instructions, but, as you saw in the video, these
25 patents go through a thorough examination process at the Patent

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1 Office before they are issued, okay? These patents are
2 presumed to be valid.

3 Now, what does that mean? That means that Google now, in
4 order to attack the validity of these patents, has to show --
5 prove invalidity by clear and convincing evidence. Google only
6 has to -- or, I'm sorry -- Sonos only has to prove infringement
7 by a preponderance, more likely than not. Google has a higher
8 burden now to prove that these patents are invalid.

9 And the evidence is going to show you in this case --
10 Dr. Almeroth is going to walk you through it -- that all of the
11 patents -- I'm sorry -- all of the prior art that Google is
12 using to attack Sonos' patents was already considered by the
13 Patent Office.

14 So here you see again the Sonos digital music system 2005,
15 that's one of the primary references Google is relying on in
16 this case for invalidity.

17 You can see Examiner McCord signed off on that. He
18 considered that before the patent was issued. Same thing for
19 Squeezebox, another one of the systems that Google is relying
20 on for purposes of invalidity. That Squeezebox you can see
21 here, already considered by the Patent Office.

22 Bose, in particular the Bose Lifestyle 50 system, another
23 one of Google's primary references, already considered by the
24 Patent Office before the patent issued. And, in fact, all of
25 the prior art, in some form, was considered by the Patent

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1 Office. All the prior art that Google is using in this case,
2 as you can see here on this slide began before the patent
3 issued.

4 Now, last thing I want to talk little bit about the
5 damages in this case. You are going to hear from Sonos'
6 damages expert Jim Malackowski. Jim is a very well-respected
7 economist. Not only is he an inventor himself on 20 patents,
8 but he has been an economic expert in over 100 different
9 intellectual property matters, intellectual property matters
10 being patents, trademarks, copyrights and those kinds of
11 things. Jim knows this game. He knows how to evaluate
12 patents.

13 Now, Jim, what he did for his analysis to figure out what
14 that royalty rate should be that Google should have to pay for
15 its infringement, he used a hypothetical licensing negotiation.
16 That's the gold standard in patent cases for evaluating what
17 the reasonable royalty rate should be for damages.

18 Now, I will just read to you here on slide what this
19 hypothetical negotiation is. It's the royalty that a
20 licensor -- in this case Sonos -- and a licensee -- in this
21 case Google -- would have agreed upon if both had been
22 reasonably and voluntarily trying to reach an agreement.

23 So it is this construct you create where you put the
24 parties back to when the infringement began and you look at
25 what reasonable royalty rate would they have negotiated to come

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1 up with, and that's your damages. Well, based on that
2 analysis, Jim had looked at this hypothetical negotiation and
3 he calculated that the '966 patent would result in a per unit
4 reasonable royalty rate of 82 cents. Did the same thing for
5 the '885 patent, found that the royalty rate would be 87 cents.
6 Again, that's a per-unit basis.

7 So we are talking about less than a dollar here of a
8 royalty rate. Less than a cup of coffee, a small cup of
9 coffee, I should say, from McDonald's. It's a low amount. But
10 Google has a lot of infringing units. You can see here for the
11 '966 patent there's over 94 million infringing units in this
12 case. And that's just on the period from November of 2019 to
13 November of 2022.

14 When you apply the low royalty rate, that 82 cents to
15 those units results in about 77 -- a little over 77 and a half
16 million dollars, similarly with the '885 patent. The
17 infringing units here are over 14 million. Again, even though
18 it's a low royalty rate, when you apply that to the 14 million,
19 you get 12 million -- just over \$12 million in damages.

20 And that's summed up here for you on this slide.

21 (Pause in proceedings.)

22 **MR. SULLIVAN:** I have nothing further, Your Honor.

23 **THE COURT:** Thank you.

24 Mr. Pak will now give the opening statement on behalf of
25 Google.

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1 Please proceed.

2 **OPENING STATEMENT**

3 **MR. PAK:** Thank you, Your Honor.

4 Good morning, jurors. My name is Sean Pak, and I'm
5 honored to represent Google in this case, and I would like to
6 thank counsel for his excellent opening remarks as well. And
7 most of all, I would like to thank you for your jury service.
8 I know it's difficult to travel here for many of you, and we
9 really appreciate the opportunity to present our side of the
10 case.

11 And His Honor instructed you, sometimes the most important
12 piece of evidence in any case may be the last thing you hear.
13 So I ask that as you hear all of the evidence come in, that you
14 take into account all of the evidence before you make your
15 final decision.

16 Now, we have -- all of us have heard about Google the
17 company. I'm very excited to share with you the story of the
18 hard-working Google engineers that make all the products and
19 services possible that many of us use every day, including
20 Mr. Ken MacKay and many other engineers that you will hear from
21 in this case.

22 Mr. MacKay is a software engineer. He joined Google to
23 work on exciting products and technologies for a technical
24 challenge, and he and his colleague, Mr. Maclellan, another
25 software engineer, actually helped build and develop the smart

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1 speaker devices from Google that we will hear about in this
2 case. You will hear from both of them.

3 In addition, we will bring to you as evidence the
4 testimony of Mr. Justin Pedro. He is a senior engineering
5 manager at Google, and his responsibilities include the
6 development of the Google Home app, which is the app that you
7 download onto a phone to be able to control all kinds of smart
8 devices, not just speakers.

9 We will also bring the testimony of Mr. Chris Chan, who is
10 a product manager. So he is not an engineer, but he works with
11 engineers to bring products together, and he was responsible
12 for the development and marketing of the Google Home app as
13 well as the smart speaker devices that you will be hearing
14 about.

15 And one of the reasons we wanted to bring these
16 individuals to your attention during this trial is not only to
17 have them describe the inner workings of the technology to
18 explain to you some of the important differences of these
19 products compared to the claim language of the claims but to
20 have them look you in the eye and tell you that they developed
21 this technology on their own. They didn't take any technology
22 relating to the zone scenes patent from anyone, including
23 Sonos, and I think that's very important testimony that you
24 will hear in this case.

25 I want to begin about -- begin by talking about the smart

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1 speaker product. Some of you are familiar with these types of
2 products. The specific products at issue are Google smart
3 speaker products. And Mr. MacKay and Mr. Maclellan will talk
4 to you about they designed these smart speakers. And one of
5 the important functions of these smart speakers is what's
6 called voice activation technology, which is Hey Google. Some
7 of you may Alexa devices from Amazon. Hey Alexa. Hey Google.

8 By speaking to these smart speaker devices, you are able
9 to unlock thousands of features; for example, as you see here,
10 you can set a timer, control a thermostat, listen to the news,
11 you can play music. You can watch television shows on your
12 television by invoking these types of commands. You can also
13 play games, listen to the news. Thousands of features.

14 And you will hear in this case that only one feature, a
15 very specific feature, has been accused of infringing the two
16 patents that we will talk about in this case.

17 The same is true with the home app to a far more extensive
18 degree.

19 The home app, the application that you would download on a
20 device like a phone or a tablet, allows you to unlock many,
21 many different types of smart devices, not only devices that
22 Google makes; for example, the Nest line of products that some
23 of you may be familiar with, but other devices from other
24 companies. For example, you could use it to control your alarm
25 system that might be connected to the network. You may be able

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1 to use home app to connect and control smart light bulbs. So
2 with a touch of a button or by speaking to the phone, you can
3 turn on, turn off or dim the lights.

4 You may be used to deal with thermostats that are smart or
5 companies that make smart locks so you can unlock or lock your
6 home's doors through this home app. And you can also control a
7 variety of other types of entertainment devices such as
8 televisions.

9 None of these other devices and their related
10 functionality controlled through the home app are accused of
11 infringing these two patents, which is about a very specific
12 way of creating and using smart speaker group technology.

13 To explain all of this to you, Mr. Pedro and Mr. Chan will
14 talk to you about the variety of different functions and the
15 hard work and innovation of Google's engineers that went into
16 building these types of products.

17 Now, the story of Mr. MacKay, Mr. Maclellan, Mr. Chan,
18 Mr. Pedro working hard on their own to develop their own
19 solutions to tough problems is really the story of Google.

20 We heard the story of Sonos, but remember, in 1998 Google,
21 too, was a startup. It was founded by two Bay Area students
22 from Stanford. And you can see here, Mr. Page and Mr. Serge
23 worked together in a garage, and their mission was to organize
24 the world's information and make it accessible and useful.

25 That was Google's original mission, and that remains the

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1 mission of Google to this day.

2 You have heard about and seen and used many of the
3 innovations that Google brought to the market, starting with
4 the search engine in 1998.

5 In 2002, they brought the Google news product that allows
6 you to gather news information from all around the world.

7 Gmail that many of us used was released in 2004, 2004, before
8 these patents were even conceived of. And in the same year
9 that these patents were filed for, Google maps was introduced
10 by Google that allow how you to geo-locate yourself and
11 important destinations and provide directions, essential tools
12 that all of you use or many of us use every day.

13 You see, Google's mission is to ultimately democratize
14 technology innovations. What that means is we want advanced
15 technology in the hands of people everywhere, not just those
16 who can purchase expensive devices.

17 Google is the pioneer of what we call the internet of
18 information, which are all these services that gather
19 information and provide them. As you see now, Google has also
20 become a pioneer and a leader in the internet of things, things
21 like smart devices that you can control rather than just
22 gathering information.

23 What is this patent about? What are these two patents?
24 And we do agree with Sonos that what these patents cover is a
25 very specific feature from the perspective of the speakers,

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1 which is the '885 patent, and that same system is being
2 described from the perspective of the controller, that is the
3 '966.

4 So you can imagine this as being two sides of the same
5 coin. You have an '885 patent that describes the technology
6 from the perspective of how the speaker would receive
7 information and then you have the '966 patent that describes
8 how the controller will send the information to those
9 receivers.

10 I want to talk to you about something that was very
11 important that was not mentioned in the presentation from
12 Sonos. The claims are not just about taking speakers and
13 putting them into multiple speaker groups.

14 The claims are not just about even taking multiple speaker
15 groups and making them overlap, which is having at least one
16 speaker that is common.

17 It also requires a very specific limitation. What that
18 limitation says is the speaker that you are adding to multiple
19 groups must continue to operate in standalone mode. Must
20 continue to operate in standalone mode. What does in that
21 mean?

22 As I indicated here, each of these twice devices when they
23 boot up and you play music to them are operating in standalone
24 mode. It is a standalone device. They are playing music
25 individually.

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1 So what these claims all require -- and I will show you
2 some of the claim language later -- is that this speaker that
3 you are adding to these other groups must be actively operating
4 in standalone mode, playing music individually.

5 Important requirement of all of the claims. Then, while
6 you are still operating in standalone mode, you then add that
7 speaker to another speaker to form a group.

8 That would be, for example, group 1. So speaker A while
9 it's playing music is being added to speaker B, group No. 1.

10 Also, while the speaker A is still playing music,
11 continuing to operate in standalone mode, it is then added to a
12 second group that is group No. 2 with a different speaker, for
13 example, C.

14 And then what has happened is that the speaker groups are
15 stored or saved for future use because these speaker groups can
16 be used or invoked at any time into the future, so you have to
17 have a place to store them.

18 That's the invention covered by the '885 patent and also
19 from the perspective of the '966 patent from the controller
20 perspective.

21 It's not just putting speakers together in overlapping
22 groups. You must meet this operating and standalone mode
23 requirement as well.

24 So you may be asking yourself is it possible? Is it
25 possible to have a speaker added to two different groups that

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1 overlap and not use anything from these two patents? Of course
2 it is possible. What you see here is you have the speaker A.
3 First it's playing music, then you stop playing music. You
4 kill the app that was actually playing music on speaker A, so
5 it is no longer operating in standalone mode. Then you add it
6 to a group one and group two, not operating in standalone mode.

7 Ladies and gentlemen, this is the Google new design that
8 Google not only developed -- it is not a hypothetical design.
9 It is a design that Google has pushed out to millions of
10 devices today. So this has been commercially accepted by the
11 public. So this is not a hypothetical design. It's a device
12 that Google has shipped out to a number of devices that exist.
13 And we wanted to do that to show that it was commercially
14 acceptable.

15 So the difference between the old design and the new
16 design is a critical issue that we will be asking your -- the
17 jurors here to decide based on the evidence that you hear.

18 His Honor did make a ruling on one claim in this case.
19 That is the '885 patent based on the old design. But His Honor
20 has left very important questions for you, ladies and gentlemen
21 of the jury, to decide after you hear all of the evidence in
22 this case.

23 And those are the questions of infringement on the '885
24 patent for the new design as well as questions of infringement
25 on the '966 patent, which has an additional limitation that is

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1 not present in the '885 patent for both the old design and the
2 new design.

3 And Sonos has the burden of actually proving infringement
4 issues in this case.

5 And Mr. Fisher, if I can just have claim 1 of the '885
6 patent brought to the jurors' attention.

7 Do you recall that I spoke to you about this operating in
8 standalone mode? That appears in claim 1 of the '885 patent.
9 It says, While operating in standalone mode all of the
10 following steps, the setup steps that counsel talked to you
11 about, must be performed while operating in standalone mode.

12 Mr. Fisher, if we can bring up in the '966, claim 1.

13 We have the same requirement in the '966 patent while
14 operating in standalone mode. While operating in standalone
15 mode, you must do the following steps to add one speaker to the
16 other groups.

17 But the '966 patent, unlike the '885 patent, also has one
18 more requirement. That is after you create these speaker
19 groups -- what I call "zone scenes" -- in temporary memory,
20 because a computer obviously needs someplace to put them while
21 they are creating them, you have to then cause those zone
22 scenes to be stored as an extra step, stored in places like
23 flash memory or hard disk drive in order so that they can be
24 used later. The speakers can be off the network, they can be
25 rebooted. And we want to make sure, according to these claims

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1 of the '966 patent, that they are stored in what's called a
2 persistent manner in some type of device like flash or hard
3 disk drive so that later they can be invoked, which could be
4 months and months later after they were created.

5 So the '885 and '966 patent both require while operating
6 in standalone mode. The '966 claims have this additional
7 requirement that they further be stored after they have been
8 created.

9 We will go back to the presentation. Thank you.

10 These are infringement questions left for you to decide
11 based on all of the evidence.

12 This is an important timeline, ladies and gentlemen of the
13 jury, and this is one of the reasons why we are trusting you to
14 make the right decision based on all the evidence.

15 You can see -- and evidence will show -- that Mr. MacKay
16 and Mr. Maclellan started working on the group feature in the
17 smart speakers from Google in March of 2015, March of 2015, and
18 then they released it shortly in December of 2015.

19 So Google already had shipped the grouping feature at
20 issue in this case by 2015. The home app that you heard about
21 was developed and released by Google in 2016, 2015 and 2016.

22 These two patents at issue in this case did not come out
23 of the Patent Office until 2020. 2020.

24 Also, one thing that Mr. -- counsel for Sonos didn't tell
25 you about was that Sonos released their version of these

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1 patented technologies for the first time in June of 2020. June
2 of 2020.

3 Google already had their technology out in the market five
4 years before these patents issued and five years before Sonos
5 decided to add the functionality at issue in this case. An
6 important timeline that the evidence will prove and also
7 something very important for you to consider as you think about
8 the rest of the case.

9 Now, some of you may be wondering how do we get through a
10 lot of the technical evidence in this case. We are talking
11 about computers and smart devices. And that's why we are going
12 to bring to you Dr. Dan Schoenfeld, who is a well-recognized
13 expert and educator, long career of teaching students. These
14 people, as you heard in the video, those ordinary skilled
15 people who are engineers and programmers, Dr. Dan Schoenfeld
16 teaches them every day. And he is going to take his expertise,
17 both from his academic background but professional research to
18 help you understand some of the technical evidence in this
19 case. That's his job. That's our job as lawyers, to explain
20 some of the technical concepts so that you can make the final
21 decision.

22 Dr. Schoenfeld is a well-accomplished engineer. He has
23 been recognized by his peers. He is a member of what's called
24 the IEEE organization, which is the world's largest electronics
25 and engineering society. He has been elected as a fellow --

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1 that's the top 1 percent -- by his peers.

2 He is also the editor and chief of the IEEE Journal on
3 Circuits and Systems for Video Technology which relates to
4 multimedia. Again, the subject matter of this case. He will
5 talk to you about some of the other experiences doing research
6 for government organizations and companies that will help you
7 understand the technology issues in this case.

8 So please don't be concerned. We are going to have two
9 weeks here to walk through the technical evidence very
10 carefully, and Dr. Schoenfeld will do his job.

11 I want to talk to you about claims generally. We have
12 been talking about claim elements and claim requirements. One
13 way to think about claims, that it's describing is a test, a
14 test with a series of questions. We have all taken tests. And
15 the answers to those questions in the infringement test must
16 all be yes. So this is an all-or-nothing test, which means
17 that even if you get one of the questions wrong, you don't pass
18 the infringement test. And that's why I described to you the
19 specific questions. Is it operating in standalone mode? Does
20 it cause storage? If the answers to any one of those questions
21 in the claims is no, you don't pass the test. There is no
22 infringement. Simple example you have a claim on a soccer
23 ball, series of four questions: Made of leather, stitched
24 together, filled with air, is it round?

25 I take a football, apply that infringement test. It has

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1 the first three elements but the shape is the wrong shape. The
2 answer is no.

3 So as you think about infringement, it is Sonos' burden
4 not to prove that some of the questions have been answered yes
5 but that all of them have been answered yes.

6 That's important because on the new design, as you saw and
7 the evidence will prove, one of the answers to the question is
8 no, while operating in standalone mode. And for the '966
9 patent talking about causing storage, the answer is no to that
10 question. And you will hear about the technology that Google
11 developed which does not require the accused zone groups to be
12 stored in a persistent manner.

13 So why are we here? You heard from the patent video that
14 there's two sides or two cross-steps in deciding a patent
15 dispute. There is the decisions that were made before the
16 Patent Office but there is also the important job that you will
17 be doing for us, which is to assess all of the evidence, not
18 just some of the evidence, not just the evidence that the
19 Patent Office got to see but all of the evidence and make the
20 final determination on questions of infringement and validity.

21 And just like all of us have the right to defend ourselves
22 when we are accused of wrongdoing, Google, too, has that right.
23 Google has the right to bring evidence and new arguments
24 because remember, as you heard from the video, Google wasn't
25 there before the Patent Office. Google didn't have the

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1 opportunity to share with the Patent Office examiner the
2 evidence and arguments that you will hear about in this case.

3 So we talked to -- as we focused on the validity issues, I
4 want you to keep in mind one important date. This is the
5 conception date, December 21st, 2005. This is the date that
6 Mr. Lambourne and Sonos agree is the date that he first came up
7 with the ideas that led to the zone scene patents
8 December 21st, 2005. So anything that came before then is what
9 we call "prior art," prior art. That means the things that
10 were publicly known. And if the claims covered things that
11 were old and obvious to engineers -- not to us, but to
12 engineers -- back in December 21st, 2005 then the patent is
13 invalid because it covers old and obvious ideas.

14 You saw the video. Patent examiners work very hard and we
15 have tremendous respect for the Patent Office, but they are
16 also looking at lots and lots of materials.

17 In this case, just with these two patents, over 72,000
18 pages of non-patent prior art material was submitted to the
19 Patent Office for one examiner on just two patents. And he did
20 his very best to try to sort through some of that evidence.

21 But the things that he didn't get to see is the testimony
22 of sworn witnesses that you will hear about, the actual
23 software at issue, the source code which I will talk to you
24 about. These are the programming instructions that tell the
25 computer what to do to carry out the functions. He never got

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1 to see any of that. He also never got to see the products in
2 operation, the product testing.

3 That is all evidence, as you heard from Judge Fogel, that
4 the patent examiner didn't get a chance to see that you will
5 have a chance to see.

6 Source code. Some of you may be familiar with this. Why
7 we call it source code is that the source is a programmer, it's
8 a human engineer like Mr. MacKay who sits down in front of a
9 computer and writes out instructions to tell the computer what
10 to do, and then those instructions are placed inside the
11 computer and when they are run, they make the computer do
12 things. So without source code, the computer is a very
13 expensive paperweight. You need code to tell the computer what
14 to do.

15 And all of these things that we are talking about, smart
16 devices, controllers, are mini computers that have computer
17 circuitry inside of them. But without the source code, they
18 wouldn't be able to perform any functions whatsoever.

19 Why am I talking to you about source code? Because both
20 of these claims from the two patents required looking at
21 program instructions. Claim 1 talks about program instructions
22 that are stored in this computer readable medium. So when they
23 are run or executed, they do certain things. Same thing for
24 claim 1 of the '966 patent.

25 So to answer one or more of the questions in the patent

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1 test, you have to look at the source code to see whether they
2 contain certain instructions or pass certain computer messages.
3 And the patent examiner, despite having all those tens of
4 thousands of materials, never got to see the source code.

5 That's why we have the checks and balances, ladies and
6 gentlemen of the jury. We have the Patent Office doing its
7 job, the one examiner doing his job, but we are asking all of
8 you to do your job, which is not only to consider what the
9 Patent Office did but to consider all of the evidence.

10 And so you heard about this presumption of validity. It
11 is true, it is our burden to show you clear and convincing
12 evidence that these two patents are invalid, but we welcome
13 that opportunity because it is our day in court. We didn't get
14 to participate before the Patent Office. We are here now. We
15 are going to share evidence that the patent examiner never saw.
16 And, ultimately, on questions of infringement and validity, it
17 will be your decisions, based on all the evidence, that will
18 make the difference.

19 Google respects intellectual property. In fact, Google is
20 one of the largest patent holders in the United States. Google
21 has over 31,000 patents. The integrity of the patent system is
22 important to Google. We want to make sure that patents that
23 cover only new and non-obvious ideas -- that's what Judge
24 Fodgel talked to you about -- new and non-obvious ideas are
25 enforced. Why?

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1 Because if you enforce patents that cover old and obvious
2 ideas to engineers, then you are not promoting innovation. You
3 are stifling innovation. You are preventing old and obvious
4 ideas from coming into the marketplace to create more
5 competition for all of us as consumers. And if you restrict
6 those sources, you may end up driving up prices.

7 It is important to Google and important to all of us that
8 only new and non-obvious ideas are protected and enforced.

9 So the evidence that you will hear in this case will be
10 the sworn testimony. You will see evidence of the software.
11 You will see evidence about source code, actual product testing
12 results. They will be all presented to you with the guidance
13 of Dr. Schoenfeld to help you understand why this evidence
14 supports the ultimate conclusions in this case that these
15 patents are not infringed for remaining products that His Honor
16 has asked you to decide and why these patents cover old and
17 obvious ideas.

18 If you decide, at the end of the day, based on all of the
19 evidence, that these patents covered old and obvious ideas to
20 engineers back in 2005, then these patents are invalid.

21 If the patents are invalid, then Google is not an
22 infringer because you cannot, as a matter of law, infringe on
23 an invalid patent, just like you can not trespass on a deed
24 that has been determined to be invalid. So that's an important
25 point that I wanted to stress to you.

OPENING STATEMENT / PAK

1 His Honor has made one ruling, but all of the other
2 decisions you will make for us.

3 One of the important pieces of prior art is something that
4 came in the public before the conception date of Mr. Lambourne
5 is the Sonos 2005 system. We heard some of the things from
6 Sonos' counsel's presentation earlier today, the news articles,
7 the device you saw. That is prior art. That is not the zone
8 scenes patent claims. That is prior art. That came before
9 what the Sonos patents -- when the Sonos patents were filed and
10 issued. Remember, Sonos didn't implement the technology until
11 2020, but it is prior art. And, as prior art, what was known
12 to engineers, based on this system, and what would have been
13 obvious to those engineers, based on this system, is prior art
14 and can invalidate these Sonos patents.

15 So some of you may be asking why is it that a Sonos system
16 can actually invalidate a Sonos patent? And the answer is
17 because we don't want companies or individuals going back and
18 getting a legal monopoly, which is a patent claim, on things
19 that are old and obvious even if they were in their own
20 products. We want to promote new innovations, not block old
21 ideas.

22 You will hear important evidence from Mr. Lambourne and
23 others. Mr. Lambourne will describe during his examination one
24 thing that Sonos' counsel didn't talk to you about, which is
25 that the Sonos 2005 system actually had a zone scene. It had a

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1 zone scene. It had one zone scene, and that zone scene was
2 called "party mode." So if you owned a Sonos system back in
3 2005, you could group all the speakers together in a party
4 mode, play all the music throughout the house and it was saved.
5 It was saved. So you can invoke that party mode any time you
6 want. So one of the two required zone scenes was already
7 present in the Sonos 2005 system.

8 You will see e-mails like this and other evidence in 2015
9 where other people were suggesting to Mr. Lambourne -- this is
10 an e-mail that shows that the original idea of actually saving
11 another zone scene didn't come from Mr. Lambourne, it came from
12 somebody else, Tom and others. And what does Mr. Lambourne say
13 in this e-mail? Ah, this would allow a user with one click to
14 put their zones into predefined groups. Think party mode.
15 Think party mode.

16 Just like Mr. Lambourne thought of party mode back in
17 2005, we want you to think about party mode because that's
18 really important. That's a feature that existed in the Sonos
19 2005 system that was old and obvious by the time that they
20 ended up filing the patents in this case.

21 Think party mode.

22 **THE COURT:** Mr. Pak, you have about three and a half
23 minutes left.

24 **MR. PAK:** Thank you, Your Honor.

25 So the important thing is, how do we combine these things

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1 in an obvious manner? And what evidence will show is that
2 party mode group existed in the Sonos 2005 system.

3 The Sonos system also allowed you to create additional
4 groups. The only thing that was missing in the Sonos 2005
5 system is putting a name, like "winter party" to that other
6 group and saving that too.

7 So we will present you with evidence including postings,
8 public postings, which is prior art from Sonos' own users
9 telling Sonos please make this obvious modification to your
10 system. Let us name and save one more group.

11 Dr. Schoenfeld will talk to you about all of the prior art
12 in this case, not just some. And he is going to talk to you
13 about system evidence, like source code that existed for Sonos
14 2005 as well as for other systems, such as Squeezebox that you
15 will hear about.

16 Sonos wasn't the first company, by the way, to have a
17 wireless smart system. That was actually Squeezebox.

18 They are asking for 50 million -- well, actually,
19 \$90 million in this case. \$90 million for one feature that
20 they didn't even implement until 2020. If the feature was so
21 valuable, why did they wait 15 years?

22 So I would like to end with this: As I think about this
23 case, you can see a jigsaw puzzle here on this slide. When
24 some of the pieces are missing, you might think to yourself,
25 and others may, that this is a nice piece of property to be

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1 developed. But when you add the pieces, you reveal something
2 wholly different. And when the pieces have been added what
3 appears to be undeveloped land that somebody else could occupy
4 and develop actually turns out to be a beautiful piece of land
5 in our state park up in Mount Tam. And just like these trails
6 that exist in our state parks, they are well traveled. These
7 ideas that are being covered by these patents are old and
8 obvious.

9 And I will end with this: Sonos' counsel showed you the
10 signpost with the different signs pointing in different
11 directions. We submit to you that the evidence in this case
12 will all point in one direction, just like the sign on a trail.
13 These patents cover old and obvious ideas. They are invalid.
14 These patented technologies are not very valuable, and Google
15 doesn't utilize them in the ways claimed by the patents.

16 We thank you for your service, we ask you to keep an open
17 mind, and we know that you will make the right decision based
18 on all of the evidence.

19 Thank you, Your Honor.

20 **THE COURT:** Mr. Pak. Okay. We are going to take a
21 break now so you can -- 15 minutes in the jury room. Please
22 remember that you are not to talk about the case yet. That
23 will happen at the end but not yet, and no going on the
24 internet. Don't look up anything, no -- just keep an open
25 mind. So we will see you back here in 15 minutes. Thank you.

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1 **THE CLERK:** All rise for the jury.

2 (Proceedings were heard outside the presence of the jury:)

3 **THE COURT:** Okay. Be seated, everyone.

4 Is there anything that we need to take up with the Judge
5 before we hear from the first witness?

6 **MR. SULLIVAN:** Nothing, Your Honor.

7 **MR. PAK:** I don't think so, Your Honor.

8 Oh, would you like to hear the hearsay objections now
9 or --

10 **THE COURT:** Well, I read some of the Sonos document.
11 Why is it -- you're trying to put in similar stuff to this
12 Sonos document; right? Why are you trying to have it both
13 ways?

14 **MR. JUDAH:** James Judah for Google.

15 Your Honor, that's actually not the hearsay document,
16 that's the -- it was not produced in discovery or relied upon
17 by any expert in any expert report.

18 **THE COURT:** I'm sorry. What is your objection? You
19 said it was hearsay earlier.

20 **MR. JUDAH:** No. I'm sorry, Your Honor. There's two
21 other documents that are hearsay. That is it was untimely
22 disclosed because it was never produced in discovery.

23 **THE COURT:** Was it requested?

24 You have to show me where -- it is not enough that it
25 wasn't produced in discovery. This is another lawyer. Gimmick

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1 you have to show me the specific place where this document was
2 requested and that it was not produced. Then you have a point.
3 But if you sat on your hands and failed to ask for the
4 document, they are free to use it all day long.

5 Where does it say that they got to produce everything that
6 they are going to use? Now, if it wasn't disclosed but
7 maybe -- you know, disclosures can be general. I don't know.
8 So show me where -- show me the document where this was
9 requested or disclosed and produced.

10 **MR. JUDAH:** Your Honor, I can call that up. I believe
11 it's going to be -- we were requesting the documents that they
12 would be relying on and their expert --

13 **THE COURT:** All right. Well, you better get your
14 homework done first.

15 Okay. Is there anything before the first witness?

16 **MR. JUDAH:** Yes. There's two hearsay objections,
17 Your Honor. I can pass up those exhibits now.

18 **THE COURT:** All right. Hand it to me.

19 (Pause in proceedings.)

20 **THE COURT:** Okay. The first is Trial Exhibit 6990
21 from MacFarlane to Rincon. What's your issue with this?

22 **MR. JUDAH:** Well, Your Honor, it's hearsay. It's --
23 Mr. MacFarlane is not going to be testifying, and this is an
24 e-mail, a Sonos internal e-mail.

25 **THE COURT:** Well, you are going to put in plenty of

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1 internal Google e-mails, aren't you, to show that you were
2 independently developing it?

3 **MR. JUDAH:** Your Honor, we will be introducing
4 business records like --

5 **THE COURT:** Well, isn't this a business record? I
6 mean, to the same extent, isn't this a business record?

7 **MR. JUDAH:** Well, Your Honor, this is an e-mail
8 describing what people were supposedly saying at a demo party
9 that it was an immediate hit and that Steve Jobs said
10 something. I mean, if Mr. MacFarlane is in court he could talk
11 about these things but he's not and this is just an e-mail that
12 he sent that a different Sonos employee, Mr. Millington, is
13 going to try to introduce. It's just hearsay.

14 (Pause in proceedings.)

15 **THE COURT:** All right. What's your response?

16 **MR. RICHTER:** Thank you, Your Honor.

17 **THE COURT:** There is hearsay within hearsay here.

18 **MR. RICHTER:** This is Cole Richter for Sonos.

19 That's not how hearsay is decided, how my counsel
20 described it. This is a business record, Your Honor.
21 Mr. Millington --

22 **THE COURT:** It's not a business record. Where does
23 it -- are saying any e-mail within the company is a business
24 record?

25 **MR. RICHTER:** Not necessarily, Your Honor, but

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1 Mr. Millington is going to testify that this e-mail was created
2 at or near the time of the events recorded, that it was in
3 Sonos' ordinary business to keep e-mails like this, so he is
4 going to lay a proper foundation for a business record.

5 The content within the e-mail is not being offered for the
6 truth, it is being offered to show that someone said it; not to
7 prove that Sonos had actually a nice name and great marketing.
8 It is not coming in for the truth on that matter.

9 **THE COURT:** Then it is irrelevant. 6990 is out,
10 O-U-T, not allowed.

11 What's the next one? 6990. Well, there are two of them.
12 Same thing.

13 **MR. JUDAH:** Yes. So the second is Trial Exhibit 0358.
14 This is another e-mail from Mr. MacFarlane and this is
15 purporting to describe a -- I believe a conversation he had
16 with a Google executive. And, again, this is -- these
17 statements in here -- it's an out-of-court statement that's
18 being submitted, apparently, for the truth of the matter.
19 Mr. MacFarlane is not a witness, he is not going to be
20 testifying.

21 **THE COURT:** Point me -- this is a long document. Show
22 me where it says what you are saying, that -- the most
23 objectionable part.

24 (Pause in proceedings.)

25 **MR. JUDAH:** For example, the second paragraph says,

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1 "Longer summary. Sundar is a Sonos user relatively recently
2 been very happy and he was just in the process of adding an
3 SUB. His pet missing features is grouping players," which I
4 asked him to tell Chris Yerga that it is a requested feature,
5 for example, so this is from 2014. And this related to also
6 some of these Cast for Audio discussions, actually.

7 **THE COURT:** Which part do you specifically object to?

8 **MR. JUDAH:** That part and the parts that relate to
9 purported statements made in this conversation with the Google
10 executive.

11 **THE COURT:** Well, where does that start? I don't -- I
12 don't --

13 **MR. JUDAH:** Well, so the subject line is the Sundar
14 Pichai discussion.

15 **THE COURT:** Yeah.

16 **MR. JUDAH:** And then the entire e-mail is essentially
17 describing his thoughts and then purported things he said. You
18 know, we travel a lot of ground, longer summary, his script.

19 (Pause in proceedings.)

20 **MR. JUDAH:** Sundar is a Google employee, Your Honor.

21 **THE COURT:** What?

22 **MR. JUDAH:** Mr. Pichai is a Google employee.

23 **THE COURT:** Is he still around?

24 **MR. JUDAH:** At Google, yes, I believe so.

25 **THE COURT:** Is he going to be called as a witness?

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1 **MR. RICHTER:** He is their CEO, Your Honor.

2 **THE COURT:** Nevertheless, are you calling him as a
3 witness?

4 **MR. RICHTER:** We are not calling him as a witness, but
5 this e-mail is a reflection of a recorded recollection created
6 at or near the time of these events, and this is admissible
7 evidence, Your Honor. This would be a business record
8 exception to the hearsay rule.

9 (Pause in proceedings.)

10 **THE COURT:** Business record is a different thing than
11 past recollection recorded.

12 Look, I'm going to -- I'm going to sustain the hearsay
13 objection, but I will give you this: You have my permission to
14 call this man to the stand even though you didn't notice him,
15 and you can ask him about this conversation and see if he will
16 repeat it. And if he says no, it never happened, then you can
17 call MacFarlane to the stand to the stand to say that it
18 happened --

19 **MR. RICHTER:** Thank you.

20 **THE COURT:** -- but this, I believe, is too much
21 self-serving hearsay. Sorry. That's the ruling. But if you
22 want to call him to the stand -- now, the other side may decide
23 it's better to let this come into evidence than it is to bring
24 Mr. Big here. That's fine. But I'm going to let you do --
25 call both of them out of turn even though they were not

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1 designated.

2 **MR. RICHTER:** Thank you.

3 **THE COURT:** All right .

4 **MR. PAK:** Your Honor, we did our homework. I can give
5 you the RFP number where we requested information relating to
6 the --

7 **THE COURT:** Hand it up to me, not the number -- no.
8 Hand me the actual request so that I can see that it was a
9 reasonable request. If it wasn't reasonable, it doesn't count.

10 **MR. PAK:** Just for the record, it is request for
11 production No. 27 requesting all documents supporting damages
12 contentions. And this document is being used by Sonos to
13 support its damages contentions in this case.

14 **MR. RICHTER:** It's not reasonable to request all
15 documents, Your Honor. That is an unreasonable rejection.
16 We've objected to that.

17 **THE COURT:** I need to see it. Let me see. Let me see
18 what it said.

19 (Pause in proceedings.)

20 **THE COURT:** Okay. We are going to take a break and
21 when I come back, please be ready to address this.

22 And why don't you have -- have your witness standing right
23 outside the door so that we can get started quickly.

24 **THE CLERK:** Court is in recess.

25 (Recess taken at 9:38 a.m.)

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(Proceedings resumed at 9:55 a.m.)

THE CLERK: Please remain seated. Please come to order.

(Pause in proceedings.)

THE COURT: All right. Be seated.

We are going to -- I don't have time to go over this discovery dispute. We will take it up at the -- before we need to get there.

I did make -- my law clerk tells me I made a mistake that I conflated the casting patents which were invalidated with Chromecast, which is an accused product. And so you can -- I take back when I said that you could not refer any more to Chromecast, I'm wrong. That's an accused product, so I take that piece back.

For the members in the gallery, people in the public, please do not stand up and walk in and out during the proceedings. And you have to wait until somebody is switching out or -- so there is an obvious break. But whenever you stand up in the middle of a presentation, like an opening statement, which several of you did, the jury looks to see who is coming in and out and then that lawyer loses out for a few seconds because you did the incourteous thing, discourteous thing of interrupting the proceedings.

So I'm not going to lock the door yet, but if it turns out that this continues, I'm going to have the court security

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1 officers lock the door and not let anyone in or out during the
2 proceedings.

3 So, there's a lot of you there. If you don't want to
4 abide by those rules, you are free to leave and stay home, but
5 that -- it's too important for the jury to hear the proceedings
6 and understand them. So, please help us on that.

7 Let's bring in the jury and get started.

8 (Pause in proceedings.)

9 **THE CLERK:** All rise for the jury.

10 (Proceedings were heard in the presence of the jury:)

11 **THE COURT:** Welcome. Be seated. At this time, Sonos
12 may call its first witness.

13 **MR. SULLIVAN:** Your Honor, Sonos calls for its first
14 witness Nicholas Millington.

15 **THE COURT:** Mr. Millington, please bring him in.

16 **THE CLERK:** May the witness please approach the
17 witness stand.

18 (Pause in proceedings.)

19 **THE COURT:** Welcome, please raise your right hand.

20 **NICHOLAS MILLINGTON,**
21 called as a witness for the Plaintiff, having been duly sworn,
22 testified as follows:

23 **THE CLERK:** Thank you. Please speak clearly into the
24 microphone. State your full name for the record and spell your
25 name.

1 **THE WITNESS:** My full name is Nicholas Anthony John
2 Millington.

3 **THE COURT:** Welcome again, and you need to see how
4 this bends up and down.

5 **THE WITNESS:** Okay. Is that better?

6 **THE COURT:** Much better. Thank you.

7 **THE WITNESS:** All right.

8 **THE COURT:** Go ahead, Counsel.

9 **MR. SULLIVAN:** Your Honor, I have some exhibits.
10 Would you like me to pass those up to you now or hand the
11 witness these books?

12 **THE COURT:** One at a time as you use them will be
13 better.

14 **MR. SULLIVAN:** Okay.

15 **THE COURT:** I have very little room up here for big
16 notebooks, so...

17 **MR. SULLIVAN:** I understand, Your Honor.

18 May I hand the witness -- approach the witness with his
19 witness exhibit book, please?

20 **THE COURT:** Are these -- you are supposed to use the
21 original marked copies. Is that what you are going to use, or
22 are you using a copy? If both sides are going to use copies --
23 are you going to use copies over there too?

24 **MR. PAK:** Yes, Your Honor.

25 **THE COURT:** All right. I will give you my little

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1 speech later, but if there is a goof, which there usually is
2 when you use copies, you will probably -- I'm not going to say
3 who is going to wind up bearing the burden of it, but it
4 happens and it's not easy to fix once the witness has given
5 testimony about the wrong document. So I will let you go ahead
6 with copies. Go ahead and hand it to him.

7 **MR. SULLIVAN:** Thank you, Your Honor.

8 (Pause in proceedings.)

9 **DIRECT EXAMINATION**

10 **BY MR. SULLIVAN:**

11 **Q.** All right. How are you doing, Nick?

12 **A.** I'm doing very well. Thank you, Mr. Sullivan.

13 **Q.** Okay. What is your current position at Sonos?

14 **A.** Currently my job title is chief innovation officer.

15 **Q.** And what are your responsibilities as chief innovation
16 officer?

17 **A.** I work with a small team of people to explore new spaces
18 that Sonos could potentially enter in order to develop new
19 products.

20 **Q.** And how long have you worked at Sonos?

21 **A.** I have worked at Sonos for 20 years.

22 **Q.** And where are Sonos headquarters?

23 **A.** Sonos' headquarters is in Santa Barbara, California.

24 **Q.** And where do you live?

25 **A.** I live in Santa Barbara as well.

1 Q. Do you have a family?

2 A. I do. I'm married and I have three kids.

3 Q. Okay. Let me take a step back and talk about how you
4 ended up at Sonos. Did you attend college?

5 A. Yes, I did.

6 Q. Where did you go to college?

7 A. I went to Duke University in Durham, North Carolina.

8 Q. Did you obtain degrees from Duke?

9 A. Yes, I did.

10 Q. What were those degrees?

11 A. I obtained a bachelor's degree in electrical engineering,
12 and I also qualified for a second major in computer science;
13 although, Duke University's practice at the time was not to
14 grant double majors.

15 Q. And while at Duke, were you a member of any societies or
16 organizations?

17 A. I was. Two that I remember sitting here today are Tau
18 Beta Pi, which is an engineering society and Phi Beta Kappa,
19 which is an academic honor society.

20 Q. After you graduated in 1998, what did you do next?

21 A. After I graduated in 1998, I went to work at Microsoft in
22 Redmond, Washington.

23 Q. And what type of work did you do at Microsoft?

24 A. I started my career at Microsoft as a software development
25 engineer, an SDE, and I worked on a product called Sharepoint,

1 which is a web-based collaboration system that businesses use
2 to exchange documents through browsers. And during my five
3 years at Microsoft, I worked my way up to a role as software
4 development lead at that company.

5 Q. And why did you end up leaving Microsoft?

6 A. Well, like I said, I had put in five years of service and
7 learned a ton but also I had the fire in my belly to get
8 involved with a start-up company of some kind and I was
9 approached by a former boss of mine, Andy Schulert, who also
10 had a joined this small company down in Santa Barbara a few
11 months before called Rincon Networks. He contacted me and I
12 thought that what they were working on started really
13 interesting, and I was interested also in getting involved in
14 something that was a little bit more fast-paced and exciting as
15 opposed to being a small cog in a big machine at a company like
16 Microsoft.

17 And so I jumped at the opportunity to get involved with
18 Rincon Networks, which was the company that ultimately became
19 Sonos.

20 Q. When did you ultimately join Sonos?

21 A. It was in April of 2003.

22 Q. How many employees did Sonos have at that time?

23 A. Ten.

24 Q. Remind me, when was Sonos founded?

25 A. It was founded sometime in 2002.

1 Q. All right. Back in 2002 what was Sonos' vision at that
2 time?

3 A. So the founders of Sonos had a vision of creating a new
4 kind of home audio system, which, unlike the systems that were
5 out there today, was built not for CDs and radios and things
6 like that but, rather, for internet-based music services, which
7 they envisaged would become mainstream even though none really
8 existed in the form that they do today at the time.

9 We also or, I should say, the founders also envisioned
10 building this experience using computer technology networks,
11 processors, screens and things like that instead of the kind of
12 technologies that had been used to build audio systems in the
13 past. So that was the vision as it existed at the time when I
14 joined.

15 Q. What was the state of the audio technology at the time
16 that Sonos' founders came up with this vision?

17 A. Well, so audio technology at the time was almost nothing
18 like what you see today.

19 First of all, in the home, most people simply had CD
20 players or radios or a boom box or something like that. A few
21 lucky people had these multi-room music systems that allowed
22 them to listen to different music in different rooms of their
23 house or the same music all over their house.

24 Those systems were expensive, they were expensive to set
25 up because they required a installer, typically, to come to

1 your house, pull wires through the walls or ceiling, repair
2 drywall and patch things. And so the systems that existed at
3 the time were very, you know, simple and low-tech compared to
4 the type of thing which Sonos envisioned.

5 **Q.** All right. Now, I'm just as excited as you are, but we
6 got to take it easy on our poor court reporter here, so I'm
7 going to ask you just to slow down --

8 **A.** I apologize.

9 **Q.** -- a little bit on your answers. No worries.

10 **A.** She has been giving me the look. I apologize.

11 **Q.** We have all gotten that look, right?

12 Now, I understand that you have a demonstrative for us to
13 illustrate a conventional audio system; is that correct?

14 **A.** Yes, I do.

15 **MR. SULLIVAN:** Can we put up that demonstrative? I
16 think it is PDX6.2.

17 (Witness examines document.)

18 **THE COURT:** I'll explain to the jury what a
19 demonstrative is. This will not be in the jury room, it's not
20 going to be received in evidence but a demonstrative is
21 something that the lawyers refer to as a -- a diagram or
22 picture or something that will help illustrate testimony.

23 So I guess that's what -- you don't plan to try to
24 introduce this into evidence, correct?

25 **MR. SULLIVAN:** That's correct, Your Honor.

1 **THE COURT:** All right. So this will be -- the reason
2 I bring it up is, this will be the only time you ever see it is
3 during this witness' testimony, and it is being used to help
4 illustrate what he is trying to say to you.

5 So with that little explanation, please proceed.

6 **MR. SULLIVAN:** Thank you, Your Honor.

7 **BY MR. SULLIVAN**

8 **Q.** Nick, would you describe what's shown here?

9 **A.** Sure. Remember I was talking before about these wired
10 whole home audio systems that worked with CD players and worked
11 with -- not with computers but with passive speakers and
12 infrared remote controls? This diagram is trying to illustrate
13 how those systems worked. You see wires running to every room.
14 You see speakers in the rooms that have no computers or other
15 kind of networking technology inside them. You need an
16 infrared remote control, like the clicker you might have had on
17 your TV. It is a simple one-way device that sends command like
18 play and pause to the AV receiver. And you see audio sources
19 like CD players and tuners. There is no internet, no streaming
20 services, not even a hard disk with music on it.

21 **Q.** Okay. You have an exhibit binder up there with you, Nick.
22 I would like you to turn to the one -- the tab marked TX7200,
23 please.

24 **A.** Okay. Yes, I have TX7200 in front of me.

25 **Q.** What is this document?

1 **A.** This is an investor presentation prepared by Sonos, and it
2 looks like it was released on March 9th, 2021.

3 **MR. SULLIVAN:** Your Honor, I would like to move
4 Exhibit TX7200 into evidence.

5 **THE COURT:** Any objection?

6 **MR. LORDGOOEI:** No objection, Your Honor.

7 **THE COURT:** All right. 7200 is received.

8 (Trial Exhibit TX7200 received in evidence.)

9 **MR. SULLIVAN:** I would like to publish --
10 Your Honor, would you like me to ask your permission to
11 publish the exhibit?

12 **THE COURT:** Yes, but you may publish this to the jury.

13 **MR. SULLIVAN:** Thank you, Your Honor.

14 **BY MR. SULLIVAN:**

15 **Q.** Okay. Let me have you turn to page 48 of TX7200 and let's
16 go zoom in on the image on the left under the heading "before
17 Sonos." And Nick, would you describe what is shown here?

18 **A.** Sure. Again, I was just talking about how these whole
19 home audio systems worked back in 2002. And the heart of those
20 systems was a device called the "AVR," the AV receiver. And
21 all of the wires that went to every other room in the house
22 would emanate out of these devices and all of the analogue
23 components like the radios and the CD players and things like
24 that would connect into the back of that device. So you can
25 see complicated intimidating wires everywhere.

1 Q. Right. Now, how did the vision of Sonos' system differ
2 from what existed at the time?

3 A. Well, Sonos' system differed in almost every possible way.

4 First of all, rather than a central AV receiver that all
5 the wires ran back to, what we envisioned and said was
6 intelligent network devices that we called "ZonePlayers" that
7 would be placed in each room of the home that would provide the
8 music functionality for that particular room.

9 Secondly, rather than all of the wires, what we envisaged
10 was a wireless system that would use computer network
11 technology to cut all of those wires.

12 Thirdly, rather than the wired sources, like the CD player
13 and the tuner, what we envisaged was internet-based music
14 sources like streaming services, internet radio and things like
15 that. And then lastly, rather than the infrared remote
16 control, what we envisaged was a smart controller that offered
17 two-way communication, a screen that could tell you information
18 about what was going on and let you do much more complicated
19 and interesting things than you could do with a simple infrared
20 remote control.

21 Q. What challenges did Sonos have when it started?

22 A. Well, we had numerous challenges, both from a technical
23 perspective and from a business perspective. And I will just
24 talk about -- talk about a few of those.

25 So from a technical perspective, a lot of the technology

1 that we wanted to use was in its -- was in its infancy. Again,
2 remember, today we take for granted that you can go home
3 tonight, kick back and stream a movie. That didn't really
4 exist in 2002. You know, Netflix was sending DVDs around in
5 mail in red envelopes. Most of us had a big CD collection that
6 we were very proud of. A lot of music was pirated. There was
7 no legitimate -- if it was from the internet. There was no
8 legitimate music services or other business models behind this
9 stuff.

10 So there was a challenge of the -- you know, the
11 technology in terms of streaming music. There was also a
12 challenge of the technology in terms of wireless networking.
13 Even today if you use a cordless or cellular phone you know
14 there's a lot of variability. Sometimes you load a web page,
15 it goes fast. Other times you load a web page and it's slow or
16 fails. Imagine what that was like 20 years ago. The
17 technology was extremely primitive, largely the domain of
18 corporate IT departments. Very few people had every thought of
19 connecting, you know, smart devices or even devices other than
20 computers to the internet. So this stuff was all very new.
21 Those are just a few of the challenges.

22 From a business model challenge, the idea that people
23 would want to quote/unquote rent their music was, for many
24 people, considered, you know, something that no consumer would
25 ever agree to, you know. It was -- the idea was I want to

1 spend my money and get my CDs and keep them forever, and so
2 there was a lot of opposition to renting music.

3 Similarly, from a -- as you can imagine, as a company,
4 with 10 or 20 or 30 employees, first of all, even finding a
5 factory that would make our product was a tremendous challenge.
6 You know, we would have people who would sign on and then they
7 would say oops, sorry, you know, the work you did for those
8 months was great but we are not going to build your product
9 after all. We're too busy, we don't think you will succeed.

10 Also remember that e-commerce, you know, going online and
11 buying something. You know, you had Amazon I think was still a
12 bookstore. You couldn't go there and launch a new product.
13 And so you had to fight for retail space. And imagine, you
14 know, at a store like Best Buy trying to convince, you know, a
15 store manager to -- to assort a product that, you know, was
16 targeting a consumer behavior that barely existed. Those were
17 just some of the challenges that we faced as a business early
18 on.

19 **Q.** And how confident were you that Sonos could actually
20 overcome these challenges?

21 **A.** You know, there were -- there were times when -- when we
22 severely doubted whether we would succeed. You know, there
23 were times when the night before a demonstration for a supplier
24 or a journalist we would literally be in a -- in the lab like
25 swapping Wi-Fi cards to find any one that would work for our

1 demo and, you know, other kinds of startup jitters of that
2 type. But at the end we also were really confident that not
3 only was streaming internet audio inevitable, you know, that
4 this was just a better way to enjoy music but also that the
5 internet, you know, was an unstoppable phenomenon. And people
6 who bet on the internet, generally the trend was their friend.
7 And so those kind of factors offset one another and kept us
8 going through some pretty challenging days.

9 **Q.** Now, when you joined Sonos in early April 2003, what work
10 had already been done?

11 **A.** So remember the company had been founded in 2002, but at
12 that time, even like are we are going to focus on the audio
13 space or not was still something that they were discussing.

14 So when I joined in early 2003, there were some, you know,
15 kind of napkin sketch architecture diagrams, the general idea
16 of ZonePlayers on a computer network had been talked about, but
17 effectively all of the software had yet to be written, all of
18 the hardware had yet to be designed, and all of the technical
19 challenges and go-to-market challenges that I described
20 remained in our future.

21 **Q.** All right. Let me have you turn to Exhibit TX6982 in your
22 book.

23 (Pause in proceedings.)

24 (Witness examines document.)

25 \\\

1 **BY MR. SULLIVAN:**

2 **Q.** What is this document?

3 **A.** Are we going to display it or should I just --

4 **Q.** Not yet. I have to ask permission first.

5 **A.** Okay. Sorry. I apologize. This document is one of the
6 sort of early architecture sketches that I talked about before
7 that was prepared in the month or two before I joined Sonos.

8 **MR. SULLIVAN:** Your Honor, I would like to move
9 Exhibit TX6982 into evidence.

10 **THE COURT:** Any objection?

11 **MR. LORDGOOEI:** No objection, Your Honor.

12 **THE COURT:** Received in evidence. You may show it to
13 the jury.

14 **MR. SULLIVAN:** Thank you, Your Honor.

15 (Trial Exhibit TX6982 received in evidence.)

16 **BY MR. SULLIVAN:**

17 **Q.** Nick, can you briefly tell me what this document is
18 showing?

19 **A.** Yeah. In some ways this is the -- this is kind of the
20 napkin sketch of Sonos that I was mentioning that the founders
21 had worked on.

22 You can see a number of the core components that I talked
23 about, including the home network that ties everything
24 together, the intelligent ZonePlayers that act as the network
25 amplifiers that go into each room of the house, the wireless

1 controller which at the time we called the "handheld," and then
2 a variety of sources, including internet-based sources that
3 connect into the system using a cable modem or DSL modem as
4 well as music sources that people might have had on their
5 computer. So it was illustrating a number of the key points
6 that I was talking about.

7 **Q.** Okay. Let me have you turn to Exhibit TX6975, please.

8 **A.** Yes.

9 (Pause in proceedings.)

10 **THE WITNESS:** I'm there.

11 **BY MR. SULLIVAN:**

12 **Q.** What is this document?

13 **A.** This document is titled "Rincon Audio ZonePlayer
14 Functional Specification" dated October 31st, 2002. So, again,
15 about -- about four or five months before I joined the company.

16 **Q.** Now, I think you mentioned this previously, but who was
17 Rincon Audio?

18 **A.** Rincon is the name of a beach near Santa Barbara but also
19 sounded kind of technical, so we sort of picked it as the code
20 name for the company, which was -- at the time I think we ended
21 up settling on Rincon Networks as the code name of the company
22 before it ultimately had been named Sonos.

23 **MR. SULLIVAN:** Your Honor, I would like to move
24 Exhibit TX6975 into evidence.

25 **THE COURT:** Any objection?

1 **MR. LORDGOOEI:** No objection.

2 **THE COURT:** Received in evidence.

3 You may show it to the jury.

4 (Trial Exhibit TX6795 received in evidence.)

5 **MR. SULLIVAN:** Thank you, Your Honor.

6 **BY MR. SULLIVAN:**

7 **Q.** All right. Let's turn to page 2 of TX6975.

8 **A.** Okay.

9 **Q.** What is being described here under that heading that says
10 "Introduction"?

11 **A.** Well, it's introducing the concept that I talked about
12 before, which is the concept of this ZonePlayer. And, like I
13 said here, you know, it talks about the ZonePlayer, you know,
14 in its role in this multizone residential audio distribution
15 system, it talks about its networking capabilities, and it
16 talks about its audio capabilities and describes it, you know,
17 as a -- you know, that it has ethernet and Wi-Fi and generally
18 also talks about, you know, the fact that it was a piece of
19 computing equipment.

20 **Q.** Now, I think you may have used this term before, but what
21 do you mean when you use the term "intelligent" to describe one
22 of these ZonePlayers?

23 **A.** So you have to remember that the speakers in these
24 traditional wired whole home audio systems, they didn't have
25 any active electronics inside of them, they didn't run

1 software, they didn't have a central processor, you know. They
2 did nothing other than relay the signal that received over
3 their speaker wire into audio signals in the room.

4 In contrast, an intelligent device, as -- as we use the
5 term, it refers to the fact that it's a device that runs
6 software, that has a processor, that can coordinate with other
7 devices that are also intelligent to get things done, that can
8 connect to the internet, all of the aspects of a -- of a whole
9 home audio system that today we might take for granted but in
10 the past were completely different than the kind of the dumb --
11 to use the opposite term from intelligent -- the dumb speakers
12 that existed in these wired systems back in 2002.

13 **Q.** And what were you tasked with doing when you started at
14 Sonos in April of 2003?

15 **A.** So at the time that I joined Sonos, I think there was a
16 total of four or five software developers in the entire
17 company. And so, broadly speaking, I was tasked on getting the
18 whole thing to work. But specifically, I was kind of assigned
19 to this ZonePlayer area, and particularly a part of the product
20 that we called "audio transport," which was really intended to
21 figure out how to get audio from the internet to each of these
22 smart devices in the different rooms of the home and figure out
23 how to get them to coordinate with one another and also how to
24 get them to coordinate with our controller to make the whole
25 experience that the founders envisaged possible.

1 Q. And what do you mean by "coordinate with one another"?

2 A. Well, remember these are intelligent, independent devices
3 that are computers that are kind of doing their thing. So
4 every problem, every technical problem that has to be solved in
5 Sonos has the complexity that you are coordinating across
6 multiple devices. There's a controller and there is one or
7 more players. The only way they can communicate with one
8 another is through an internet. It's not like an app on your
9 phone where everything is all in one place. There are
10 independent devices that have to be coordinated. And so
11 specifically the areas of coordination that we focused on first
12 were grouping and synchronization.

13 MR. SULLIVAN: Your Honor, may I give the witness a
14 cup of water?

15 THE COURT: Of course.

16 (Pause in proceedings.)

17 BY MR. SULLIVAN:

18 Q. All right. When you refer to synchronization, what are
19 you referring to? So if you remember the diagram that we
20 showed about the house and its rooms and the players, one of
21 the challenges that you run into in a system like that is often
22 the speakers that are attached to those players are all within
23 earshot of one another. For example, if I'm standing between
24 my living room and my dining room, I'm going to hear some audio
25 from the -- from the living room and other audio from the

1 dining room. And if those two are playing the same thing in a
2 group, the audio has to be really well synchronized; otherwise,
3 you will hear an echo or a delay or a vibration or other
4 phenomena like you might notice in a stadium if there is an
5 announcement and it kind of echoes all around.

6 And so one of the key things we had to solve is how to
7 synchronize audio over the same kind of unreliable wireless
8 network that I was talking about before, the same one that has
9 trouble loading web pages on your phone, the same one that was,
10 you know, barely deployed widely back in 2002.

11 And so the principal challenge was to offer the
12 synchronized audio in a -- in an environment where that is not
13 easy to achieve.

14 Related to that was if -- again, if you think about a
15 music, the way most people think about music, they are not
16 thinking about what room should I listen to this music in, they
17 are just playing the music. And so we added this extra
18 dimension of complexity, which is like where is this music
19 actually going.

20 And so we had to create this concept of grouping, which
21 would allow the customer to either, you know, play music in --
22 you know, to one standalone speaker or to play music to a group
23 of speakers at the same time. And so not only did you have to
24 synch, but you also had to coordinate this grouping process so
25 that the customer could kind of understand what's going on and,

1 you know, build these groups in order to listen to music
2 throughout their home.

3 Keep in mind, too, that many of these problems were really
4 easy in the days of a traditional analogue audio, right? If
5 you want two speakers to play in synch, just connect them to
6 the same wire and you're done.

7 That's not how computer networks work. The devices are
8 independent. They're -- the network is unreliable. There's
9 varying delays. And so a pattern throughout the whole
10 development of Sonos is things that were easy in that
11 environment become hard in a computer network environment,
12 which then throws off problems that we, as an engineering team,
13 have to solve.

14 **Q.** And what mechanism did you come up with for
15 synchronization?

16 **A.** Well, again, that's quite a technical topic that I'm not
17 going to go into in a tremendous amount of detail, but at a
18 high level if you think about your kitchen you might have your
19 microwave that's reading 10:30 and your stove which is reading
20 10:31. So computer clocks have to be properly -- you have to
21 make accommodations for those differences in clocks, first of
22 all.

23 And then, secondly, you have to coordinate amongst the
24 devices so that, effectively, what they are doing is they are
25 each receiving a piece of audio that plays at a future time

1 that's the same.

2 So that allows them to buffer the audio and get ready to
3 play it and then when that moment in time arrives they both
4 start at the same time. If you just send it, again, it won't
5 work because of the delays in the networks like I was
6 describing. And so those were the kind of the two major
7 technical challenges that we faced, introducing the clock
8 synchronization element and then introducing this playback
9 timing information to -- to let the players coordinate with one
10 another on that future time when they would start and continue
11 playing.

12 **Q.** You mentioned the term "grouping," I believe. Could you
13 provide a little more detail regarding your involvement in the
14 development of dynamic grouping at Sonos?

15 **A.** Sure. Like I mentioned, I was the software developer in
16 charge of audio transport and synchronization. Those
17 technologies go hand in hand with grouping because the reason
18 why you need to synchronize the audio is to handle a group like
19 living room plus dining room that you have created, you know,
20 in the -- using the user interface that we offer.

21 And so the grouping technology that we had in 2005 was a
22 technology that today we refer to as dynamic grouping. And the
23 idea behind dynamic grouping is that any moment on the fly I,
24 as the user, can decide I would like my living room and my
25 dining room to now work together as one. At any moment on the

1 fly I can change my mind, so I can go and remove dining room or
2 remove living room from that group.

3 Again, at any moment that group or that standalone player
4 can either be playing music or not playing music. And my
5 grouping operations, you know, continue what was going on
6 before if I -- if I linked two rooms together so that now both
7 dining room and living room would be playing the same thing.
8 And the playback stops if you remove the player that was no
9 longer -- you want to be part of the group.

10 So that's kind of the concept behind dynamic grouping.
11 You make your choice about player A needing to be grouped with
12 player B, and your choice is invoked immediately by configuring
13 those players to play and synch with one another.

14 **Q.** Who else at Sonos was working on this grouping technology?

15 **A.** Well, I had a -- a colleague whose name was Rob Lambourne,
16 and he was the other employee at Sonos who was working deeply
17 on the grouping experience at the time.

18 **Q.** And how was your working relationship with Rob?

19 **A.** I had a great working relationship with Rob. We had
20 complimentary skills. If you imagine the analogy of putting a
21 house together, Rob was the architect and I was the builder.
22 He would come up with ideas about how the product should work,
23 how it should be experienced by the customer and also, in
24 parallel, I would come up with technical implementations and we
25 would work together to make those two meet so that not only was

1 the experience of using the product comprehensible to the
2 customer but also it was compatible with the way that we had
3 implemented it -- implemented it technically.

4 And over time we both learned a ton from one another as
5 well. So I became more familiar with, you know, the needs of
6 users that we were learning about as we developed the product,
7 and Rob became more familiar with the underlying technology
8 that I was developing for dynamic grouping and synchronization
9 and specifically the APIs that were exposed by our players in
10 order to make it possible for the controller to perform the
11 grouping operations.

12 **Q.** You mentioned that term "API." What is an API?

13 **A.** API stands for application programming interface. So in
14 simplest terms what an API is, is a piece of software that
15 allows two pieces of software to communicate with one another.
16 So the notion of exposing an API would be, hey, I'm a Sonos
17 player, I support grouping, this is what you need to do to me
18 in order to group me and ungroup me.

19 And so as I was developing my technology, I also developed
20 these APIs, which are a combination of documentation and source
21 code that were then used on the controller in order to
22 implement the grouping experience that we have been talking
23 about.

24 **Q.** Now, you mentioned that Rob was the architect and you were
25 the builder. How familiar was Rob with, you know, the aspects

1 of the system that related more to the building as opposed to
2 that architecture?

3 **A.** Well, Rob has a background in design technology, so he had
4 worked, prior to Sonos, on number of products in the consumer
5 electronic space. And so Rob -- it was easy to have
6 conversations with Rob about, you know, how the technology
7 worked and, most importantly, how the user interface to the
8 product could make it comprehensible to the customer what the
9 technology was doing. Because remember, technology isn't
10 perfect. And so the user interface has to be both
11 understandable and reflect the reality of how the underlying
12 technology works. And Rob is excellent at bridging those two
13 words.

14 (Pause in proceedings.)

15 **BY MR. SULLIVAN:**

16 **Q.** After the design work, which we just discussed in 2003,
17 when did Sonos first demonstrate its products to the public?

18 **A.** My recollection is that Sonos first demonstrated its
19 products to the public at the All Things Digital conference,
20 which was an event that was sponsored by Walter Mossberg of the
21 *Wall Street Journal*, and that conference was in the summer of
22 2004.

23 **Q.** And how were Sonos' products received at that conference?

24 **A.** Well, it was actually a bit of a battle to even get into
25 the conference. We couldn't be on the main stage floor because

1 we weren't important enough to get there, but we had a
2 demonstration out in the hallway. And our demonstration
3 consisted of two Sonos players and a Sonos controller -- maybe
4 it was two or three, I don't remember -- but the demonstration
5 showed off grouping, it showed off synchronization, it showed
6 off two-way control between the controller and the players, and
7 it showed off internet streaming audio playback. And for many
8 attendees at the conference this was the highlight of the show,
9 as I recall.

10 All right. Let's turn to Exhibit TX308 in your binder,
11 please.

12 (Witness examines document.)

13 **THE WITNESS:** Okay. Yes, I'm there.

14 **BY MR. SULLIVAN:**

15 **Q.** All right. What is this document?

16 **A.** This document is a reproduction of some pages on the Sonos
17 corporate website that talk a little bit about the corporate
18 history and the innovation story that underlies Sonos' products
19 today.

20 **MR. SULLIVAN:** Your Honor, I would like to move TX308
21 into evidence.

22 **MR. LORDGOOEI:** No objection, Your Honor.

23 **THE COURT:** Received in evidence.

24 (Trial Exhibit TX308 received in evidence.)

25 **MR. SULLIVAN:** May I publish this to the jury,

1 Your Honor?

2 **THE COURT:** Yes, you may.

3 **BY MR. SULLIVAN:**

4 **Q.** All right. Let's take a look at the bottom of page 4 of
5 TX308.

6 **A.** Okay. I'm there, Mr. Sullivan.

7 **Q.** Who is that a picture of, Nick?

8 **A.** So, on the right you have Tom Cullen, who is one of the
9 founders of Sonos. And on the left you have a Bill Gates, who
10 is the founder and CEO of Microsoft, which at the time that
11 this picture was taken at the CES show in January 2005, was one
12 of the most powerful technology executives in the United
13 States.

14 **Q.** Now, I think we have a blown-up copy of this in your
15 demonstratives?

16 **MR. SULLIVAN:** So let me ask the PDX610 be put up on
17 the screen for me, John. There you go.

18 **BY MR. SULLIVAN:**

19 **Q.** When was this photo taken?

20 **A.** This photo was taken at the Consumer Electronics Show,
21 which is, if you can imagine, one of the biggest conventions
22 that takes place in Las Vegas every year in January. This
23 picture was at a 2005.

24 And just as some background, there will be huge companies,
25 like Samsung, that will have, you know, multistory booths and

1 things like that. And then there will be one hall, which has
2 all the small companies. And someone like Bill Gates will
3 enter that hall and he will walk around for five minutes and
4 one or two things will capture his attention.

5 **Q.** Were you present when this photo was taken?

6 **A.** Yes, I was.

7 **Q.** And what were Bill Gates and Tom Cullen discussing?

8 **A.** Well, you can see just barely at the bottom of the picture
9 that Tom Cullin is holding the Sonos controller that I talked
10 about that we had developed and that he's explaining to Bill
11 Gates how the product works and what technological achievements
12 it represented.

13 **Q.** And what did Bill Gates think about your product?

14 **A.** He was very impressed.

15 **Q.** Now, when did Sonos first release a commercial product?

16 **A.** Sonos released its first commercial product or, should I
17 say, "products" because we released both the ZonePlayers and
18 the controller sometime in either late January or early
19 February 2005.

20 **Q.** Okay. And there were two such products; right?

21 **A.** Correct. There was the ZonePlayer 100, which was the
22 intelligent amplifier that the user was intended to place in
23 each room of their home for this multiroom audio playback like
24 I was describing, and then there was the controller 100, which
25 was the device with the colored screen that let customers

1 select and group rooms of their house and also access all of
2 their music content that they had available to them.

3 **MR. SULLIVAN:** Your Honor, I have a physical Exhibit.
4 It is TX3840. And I ask for permission to approach the witness
5 and hand the exhibit to the witness.

6 **THE COURT:** Sure. Go ahead.

7 (Pause in proceedings.)

8 **BY MR. SULLIVAN:**

9 **Q.** All right. What is that device that's been marked as
10 TX3840?

11 **A.** This is the ZonePlayer 100, the product that we launched
12 in 2005 that, like I mentioned, is a wireless internet
13 connected intelligent amplifier. You put one of these in each
14 room of your home where you wanted music, connect it up to
15 speakers and connect it to your home internet and then Sonos'
16 software would take over and provide the multiroom music
17 functionality and grouping functionality that I have been
18 talking about.

19 **MR. SULLIVAN:** Your Honor, I would like to move TX3840
20 into evidence.

21 **MR. LORDGOOEI:** No objection.

22 **THE COURT:** Received. Well, the jury has already seen
23 it, but -- okay. It's in evidence.

24 (Laughter.)

25 (Trial Exhibit TX3840 received in evidence.)

1 **MR. SULLIVAN:** Your Honor, may I approach the witness
2 with another physical exhibit?

3 **THE COURT:** Yes, please do.

4 (Pause in proceedings.)

5 **BY MR. SULLIVAN:**

6 **Q.** All right. I have handed you an exhibit that's been
7 marked PX100.

8 Can you tell me what that device is?

9 **A.** Yes. This is the controller 100, the wireless controller
10 that I mentioned when I was first starting to talk about the
11 products that we developed.

12 This is the product where you would perform the grouping
13 operations, the dynamic grouping operations that I was
14 describing earlier in my testimony.

15 **MR. SULLIVAN:** Your Honor, I would like to move PX100
16 into evidence.

17 **MR. LORDGOOEI:** No objection, Your Honor.

18 **THE COURT:** All right. Received.

19 Now, sometimes you say "TX" and now you are saying "PX."
20 What is the difference?

21 **MR. SULLIVAN:** I knew you were going to hit me with
22 this one, Your Honor. This is, I think, the only exhibit we
23 have marked with a P. And I apologize. It was marked before
24 we switched to the TX.

25 **THE COURT:** All right. That's fine.

1 Received in evidence.

2 (Trial Exhibit PX100 received in evidence.)

3 **MR. SULLIVAN:** Thank you, Your Honor.

4 **BY MR. SULLIVAN:**

5 **Q.** Now, I want to talk a little bit more about how the ZP100,
6 the first one I handed you, how that product generally
7 operates. Can you describe that for me?

8 **A.** Okay. Yes, sure.

9 Remember, this product is built for a multiroom music
10 system. So the idea would be you would put one of these in
11 each room of your house where you wanted music.

12 And, generally speaking, for the purposes of music
13 playback, there were two operational modes of the device. The
14 first was a standalone mode in which the ZonePlayer 100 is not
15 grouped with any other players, and the second was a grouped
16 mode in which it is grouped with one or more other players.

17 **Q.** So other than as a standalone player or a member of a
18 group, how else can a ZP100 operate?

19 **A.** There's no other ways of operating. It is always either
20 standalone or grouped.

21 **Q.** What about a ZP100 that is not playing any audio, what
22 mode of operation is that in?

23 **A.** Even so, it is in either the standalone mode or the
24 grouped mode.

25 If it's in a grouped mode, it will be coordinating with

1 the other members of its group to get ready for playback.

2 Remember the clocks in the kitchen that I mentioned out of
3 synch? Those have to be synchronized to be ready for playback.

4 And so even if two Sonos players are merely grouped but
5 not playing, they will still be configured for synchronized
6 audio playback and needing to synchronize in the way that I
7 described.

8 **Q.** Okay. I believe you have some demonstratives for us to
9 illustrate this dynamic grouping that you have been discussing;
10 is that correct?

11 **A.** Yes.

12 **Q.** Let me have you turn to PDX6.3.

13 (Pause in proceedings.)

14 **THE WITNESS:** Yes, I'm there.

15 **BY MR. SULLIVAN:**

16 **Q.** Would you describe this document?

17 **A.** Sure. So this grid of four rooms kind of represents a
18 house and its four rooms. And what you can see here is, you
19 can see ZP100 A in one room and you can see ZP100 B in one room
20 and you can see the controller.

21 In this illustration, the two devices are operating in
22 standalone mode because they have not yet been grouped and,
23 therefore, they are not coordinating for the purpose of
24 synchronous audio playback.

25 **Q.** Okay. Let's turn to the next demonstrative you have here,

1 PDX6.4. What is shown in this slide?

2 **A.** This slide is illustrating how the grouping operation
3 takes place. In particular, what you can see here is that the
4 CR100, our controller, has invoked this group that consists of
5 ZonePlayer 100A and ZonePlayer 100B. So even though they are
6 not playing any music yet, they are -- they are synchronized
7 and coordinated and ready to play music.

8 **Q.** And when do ZP100 A and ZP100 B start coordinating with
9 each other?

10 **A.** They start coordinating as soon as they are requested to
11 group with one another on the -- on the CR100. Immediately
12 that group gets invoked.

13 **Q.** Okay. I believe you have used this term "invoke" a couple
14 of times. Can you elaborate a little more on what you mean by
15 invoke?

16 **A.** Yes. When we talk about a group being invoked, we talk
17 about that group being put into effect for the purposes of
18 synchronized playback. And that becomes important later on
19 when we talk about, you know, invoking a group now versus in
20 the future. But in this particular scenario, with the 2005
21 products, the only way to invoke a group was to invoke it
22 immediately as soon as you've made the selection in the UI of
23 what players you wanted to have grouped with one another.

24 **Q.** All right. Let me have you turn to PDX6.5.

25 What is shown in this slide?

1 **A.** This shows that the players are still grouped, and now
2 they've received an additional command that gets them going
3 playing music.

4 **Q.** Now, after Sonos released its original products in January
5 of 2005, how were those products received?

6 **A.** Generally speaking, the reception was great. Of course,
7 we were very small still at the time, so we didn't have a giant
8 megaphone to generate tons of publicity, but the customers that
9 had our products as well as the technical and consumer
10 electronics press were very impressed with the products that we
11 had made.

12 **Q.** Now, let's take a look at TX6979.

13 (Witness examines document.)

14 **THE WITNESS:** Yes, I'm there.

15 **BY MR. SULLIVAN:**

16 **Q.** What is this document?

17 **A.** This document is a review of the products that I talked
18 about, the ZonePlayer 100 and the controller 100 in *PC Magazine*
19 dated March 22nd, 2005.

20 **MR. SULLIVAN:** Your Honor, I would like to move TX6979
21 into evidence.

22 **MR. LORDGOOEI:** No objection.

23 **THE COURT:** Received. You may show it to the jury.

24 (Trial Exhibit TX6979 received in evidence.)

25 \\

1 BY MR. SULLIVAN:

2 Q. Can you briefly explain what this review said about Sonos'
3 original products?

4 A. Sure, yes. I mean, you can see the title right there "An
5 audio hub that actually works easily." I think that says it
6 all, in terms of highlighting the previously unsolved technical
7 problems that we had to overcome in order to deliver our
8 product.

9 Also, if you look at the red graphic in the top left, it
10 talks about editor's choice. *PC Magazine* was a magazine I grew
11 up actually reading as a kid, believe it or not, and it was the
12 toughest technical review magazine. Bill Howard, one of their
13 toughest editors, editor's choice, their award for the best
14 product in a category that they most wanted to recommend to
15 their customers. So even though not everyone reads *PC Magazine*
16 these days, for me and for our early customers, this was an
17 incredible affirmation of the work that we had done in
18 delivering these products.

19 Q. All right. Let's -- let's have you go down to near the
20 bottom of the second column, if you will.

21 A. Okay.

22 Q. If we can zoom in there. Yeah. There is some sentences
23 there that starts with "It can play the same music throughout
24 the house perfectly synchronized." Can you tell us what's
25 being referred to here in this paragraph?

1 **A.** At a high level, this is referring to the grouping and
2 synchronization technology that myself and Mr. Lambourne worked
3 on in the early days of Sonos. And, more specifically, it's
4 talking about, A, this problem is hard, that's why they use the
5 word "perfectly," because it's not easy to eliminate those
6 echoes and delays that I was describing; and secondly, it's
7 talking about how this functionality was, you know, something
8 that they did not see much of in the other products that, you
9 know, were out there.

10 And it's even talking about some of the specifics of the
11 dynamic grouping technology, talking about both playing the
12 same music or putting different music in different rooms and
13 being able to make all of those changes on the fly immediately
14 using the controller.

15 **Q.** All right. Let me have you turn to TX6974 in your binder.

16 (Witness examines document.)

17 **THE WITNESS:** Yes, I'm there.

18 **BY MR. SULLIVAN:**

19 **Q.** Okay. What is this document, Nick?

20 **A.** This is a -- this is a -- you might call it a "pitch dec"
21 or a -- you know, a sort of a presentation of Sonos, the
22 company. It could have been prepared for an investor, it could
23 have been prepared for a -- you know, as a place where we might
24 have wanted to sell the product, that type of purpose.

25 **MR. SULLIVAN:** Your Honor, I would like to move TX6974

1 into evidence.

2 **MR. LORDGOOEI:** No objection.

3 **THE COURT:** Received in evidence.

4 You may show it to the jury.

5 **MR. SULLIVAN:** Thank you, Your Honor.

6 (Trial Exhibit TX6974 received in evidence.)

7 **BY MR. SULLIVAN:**

8 **Q.** Let me have you turn to page 6 of TX6974, Nick. And what
9 is being shown on this page?

10 **A.** Yeah, so this -- this -- excuse me. This page is
11 summarizing some of the other reviews that we saw of our early
12 2005 products. Probably the most prominent is Walter Mossberg,
13 who at the time was the top technology columnist at the *Wall*
14 *Street Journal*, which was a newspaper or is newspaper that is
15 read by both technical and non-technical audience describing
16 Sonos as easily the best music streaming product I have seen
17 and tested. It's the Lexus of the category. He is talking
18 about the 2005 products that our startup had launched in
19 January.

20 **Q.** And let's turn to the next page, page 7.

21 What is this slide describing?

22 **A.** This slide shows the logos of a number of publications,
23 both general interest like *Time Magazine* or *USA Today* or
24 specific to the field of audio and video, like *Sound and Vision*
25 or *Popular Science*.

1 And again, what it's -- what it's talking about is the
2 wide range of positive reviews that we received for the -- for
3 the products.

4 And remember, to even get a newspaper or magazine to write
5 about a product from a company that no one's ever heard of,
6 that's not an easy feat. They have to pick this thing up and
7 say, "This is genuinely different. This is not something I
8 write about every day. This is something that my audience
9 would be interested in." And so I think it's instructive just
10 to kind of highlight the type of interest that a no-name
11 company from Santa Barbara was able to generate through its
12 technical innovation.

13 **MR. SULLIVAN:** All right. We can put that one down.
14 Thanks, John.

15 **BY MR. SULLIVAN:**

16 **Q.** Now, after Sonos released its original ZP100 and CR100
17 products, what was one of the next big milestones for Sonos?

18 **A.** Well, there were, of course, numerous milestones that we
19 had along the way, but probably the most significant early
20 milestone was the rise of the smartphone.

21 Keep in mind that when Sonos launched in 2005, the iPhone
22 was still a couple of years away, not to mention other things
23 that followed like Android and, you know, various other kinds
24 of smartphone technologies. And so -- but when that product
25 arrived, of course, as you remember, it hit the industry like a

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1 thunderbolt. And we looked at that product and we realized
2 that we would be able to deliver a much easier and less
3 expensive control experience that would allow us to reach more
4 users if we made controlling Sonos an application for the
5 iPhone and later on other smart phones instead of, you know,
6 simply selling our own hardware, which we also continued to do.

7 And so one of the important early milestones was the
8 development of Sonos for the iPhone.

9 **THE COURT:** Excuse me one minute. Ms. Johnson, do you
10 need to take a break? Is that what you need?

11 **JUROR JOHNSON:** Yes, please.

12 **THE COURT:** We will take a break at this time for 15
13 minutes and adjust our schedule accordingly. Thank you.

14 **THE CLERK:** All rise for the jury.

15 (Proceedings were heard outside the presence of the jury:)

16 **THE COURT:** Okay. Be seated. How much more do we
17 have on direct examination?

18 **MR. SULLIVAN:** My guess is another half an hour, 45
19 minutes.

20 **THE COURT:** Okay. Well, thank you. We will take a
21 break too.

22 (Recess taken at 10:52 a.m.)

23 (Proceedings resumed at 11:03 a.m.)

24 **THE CLERK:** All rise for the jury.

25 (Proceedings were heard in the presence of the jury:)

1 **THE COURT:** Thank you. Be seated. All right.

2 Please continue, Mr. Sullivan.

3 **MR. SULLIVAN:** Thank you, Your Honor.

4 **BY MR. SULLIVAN:**

5 **Q.** Nick, let's turn to TX6730, your exhibit binder there.

6 (Witness examines document.)

7 **BY MR. SULLIVAN:**

8 **Q.** What is this document?

9 **A.** This document shows a log of basically every software
10 release that Sonos made over a time period from the very
11 beginning, 2005, until summer of 2020.

12 **MR. SULLIVAN:** Your Honor, I would like to move TX6730
13 into evidence.

14 **MR. LORDGOOEI:** No objection, Your Honor.

15 **THE COURT:** Received in evidence.

16 **MR. SULLIVAN:** May I publish it to the jury?

17 **THE COURT:** Yes, you may.

18 (Trial Exhibit TX6730 received in evidence.)

19 **BY MR. SULLIVAN:**

20 **Q.** Okay. Nick, I would like to turn your attention to page
21 24 of TX6730. And what is the change log entry at the top of
22 this page referring to?

23 **A.** This entry is referring to the Sonos controller for iPhone
24 and iPod Touch, our first version that we released. Its
25 internal code name was Iggy, and it was released on October 28,

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1 2008.

2 **Q.** And how about a little bit more recently, what were --
3 what was one of the major milestones that Sonos released in
4 just the last few years?

5 **A.** In the last few years, we released a new version of all of
6 our system software that we called the "S2 experience."

7 **Q.** And what is S2?

8 **A.** S2 is a software release that introduced some really
9 important features for us, including support for high-res audio
10 formats, which is an innovation that's been, you know,
11 spreading throughout the industry in terms of improving audio
12 quality. And it also introduced a feature that we call "saved
13 groups" or "zone scene style grouping."

14 **Q.** And can you briefly describe what zone scene grouping is?

15 **A.** Remember before how I talked about dynamic grouping where
16 the group that you create is invoked immediately and it's
17 temporary in the sense that if you remove another player from
18 it, it goes away.

19 So zone scene grouping was another way of grouping players
20 together that we started thinking about, actually, in 2005.
21 And it was in 2020 in this S2 release that we finally
22 introduced that feature to the public.

23 Keep in mind that, you know, Sonos is a company focused on
24 multiroom music. Grouping is a big deal. And so that was one
25 of the reasons why we introduced this new way of doing it in

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1 this S2 release, kind of this major update to our system
2 software.

3 In the -- in the saved groups or zone scenes model,
4 grouping works quite differently. Rather than grouping players
5 and then having the results of that operation take effect
6 immediately, instead you can kind of pre-create a group with
7 the set of players that you pick.

8 For example, let's say you always listen to music in the
9 living room and bedroom in the morning. You could pre-create a
10 group called "morning." You could put those players into it.
11 And then you could invoke it into the future to get those
12 players to be grouped together so that, for example, every
13 morning when you come downstairs you can go in and invoke that
14 group and recreate its many times or invoke it as many times as
15 you want. So it is different from the on-the-fly instant
16 grouping that we had. Instead, this is kind of a way of
17 pre-grouping players and then later on invoking the results of
18 that -- that work.

19 **Q.** All right. Let me have you turn to TX7214 in your binder.

20 (Witness examines document.)

21 **THE WITNESS:** Yes, I'm there.

22 **BY MR. SULLIVAN:**

23 **Q.** Can you tell me what this document is?

24 **A.** Sure. So this document is a -- a section of our support
25 website that describes the various ways that you can perform

1 grouping using the Sonos app as of the S2 software.

2 **MR. SULLIVAN:** Your Honor, I would like to move TX7214
3 into evidence.

4 **MR. LORDGOOEI:** No objection.

5 **THE COURT:** Received.

6 And you may show it to the jury.

7 **MR. SULLIVAN:** Thank you, Your Honor.

8 (Trial Exhibit TX7214 received in evidence.)

9 **BY MR. SULLIVAN:**

10 **Q.** Okay. Nick, I'm going to have you focus on the second
11 page of TX7214 and under the heading "Saved Groups."

12 **A.** Yes.

13 **Q.** Can you tell me what's being described here?

14 **A.** This is talking about the saved groups or zone scenes
15 style grouping that I just described. And you can see that it
16 has a two very distinct steps. One of them is the
17 create-a-group step, which you see in the top left corner, and
18 that's referring to, you know, picking the set of players that
19 you want in your saved group and naming that group and saving
20 it. And then another step, which is called "use a saved
21 group," and that's referring to the separate operation of
22 invoking the saved group for the purpose of synchronized audio
23 playback.

24 **Q.** Now, when did Sonos begin developing zone scene --
25 sorry -- zone scene grouping?

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1 **A.** Well, keep in mind, like I said before, that in some ways
2 the whole product was about multiroom music. And so, from the
3 very beginning, we were thinking about not just the way that
4 we -- that we did it in the original release of the product but
5 also of new and improved ways that we could accomplish that
6 operation, because it was so central to the not only the
7 competitive differentiation of our products but also the user
8 experience. And so we were thinking about the saved group or
9 zone scene style grouping quite early on, I think as early as
10 2005.

11 **Q.** And why did Sonos wait until 2020 to enable zone scenes in
12 its products?

13 **A.** Yeah. I mean, you would be tempted to look at that list
14 of software releases that Mr. Sullivan had up on the screen
15 before and say these guys had a thousand things that were a
16 higher priority, but keep in mind that things on that list were
17 things like reacting to the rise of the smart phone, things
18 like entering the -- the home theater business from a standing
19 start to become the leading brand today, things like
20 introducing our first speaker as opposed to an amplifier,
21 things like the -- you know, the development of the Sonos
22 controller for Android, not to mention every single music
23 service that you use today was invented pretty much during
24 that -- during that timeline. Spotify, Apple Music all came
25 about during that time.

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1 So we were a small company and we were busy and I regret
2 that we didn't, you know, take action and launch the saved
3 group functionality right after we had the idea, but that's the
4 reality of -- of, you know, why the feature was, you know,
5 first conceived and invented in 2005 but then not launched
6 publicly until 2020.

7 **Q.** Now, what advantages, if any, does zone scene grouping
8 have over dynamic grouping related to user efficiency?

9 **A.** Well, from the user's perspective, the biggest advantage
10 is that it is a significant shortcut, right? Imagine that
11 scenario that I was describing before, the morning routine
12 scene, for example, only a more complicated one, you know,
13 where I might have ten players, you know, or I might be a
14 restaurant instead of a home with lots of listening zones.

15 And so the zone scene style grouping let's the user in one
16 step, as it shows right here in the use a saved group document,
17 in one step they can group together a -- or they can invoke a
18 group consisting of a large number of players; not necessarily
19 all their players, but a large number of them and avoid redoing
20 that work again and again of selecting the particular players
21 that are implicated, saving the group and having it being
22 invoked instantly.

23 **Q.** And what advantages, if any, does zone scene grouping have
24 over dynamic grouping related to using a player in the zone
25 scene for individual playback?

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1 **A.** Well, the problem with the dynamic grouping technology is
2 that if the user simply removes a player from their group,
3 that -- that -- the group goes away, right, because now it no
4 longer consists of its original membership.

5 And so if you want to go and listen to some different
6 music for a while and then someone comes along and says, no, I
7 want the groups -- the players that were in the scene to once
8 again be grouped together, now with the zone scenes or saved
9 groups they can recreate that grouping in one go; whereas,
10 before if they had broken a player out of the group for the
11 purpose of individual music playback or if they'd broken five
12 players out of the group, that's five steps that they have to
13 take to go and put things back together.

14 **Q.** What advantages, if any, does zone scene grouping have
15 over dynamic grouping relating to using the same audio player
16 in multiple groups?

17 **A.** Well, so, at any given time with dynamic grouping a player
18 can only be member of one group, right? The player is either
19 configured to synchronize -- player B is either configured to
20 synchronize with player A or configured to synchronize with
21 player C. It's not a -- you can't -- you can't have a player
22 be a member of two groups concurrently.

23 In contrast with to saved groups, because they are not
24 invoked immediately, you can set up two different saved groups
25 that each contain the same player. For example, you might have

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1 two saved groups called "upstairs" and "kids rooms." Even
2 though they consist of different players, they, you know, share
3 some players in common because maybe my kids' rooms are
4 upstairs. And the advantage of saved groups is that I can
5 create those two groups upstairs and kids rooms that both
6 contain those same players.

7 **Q.** What advantages, if any, does zone scene grouping have
8 over dynamic grouping relating to naming?

9 **A.** Well, you couldn't name dynamic groups, so it has the
10 advantage of having that capability. A saved group can be
11 named; whereas, dynamic groups cannot be named.

12 And here I'm talking about the end user picking the name,
13 of course.

14 **Q.** Now, how, if at all, has the importance of zone scene
15 technology changed over the years?

16 **A.** I would say in general the importance of the technology
17 has steadily increased over the years.

18 **Q.** Well, what importance, if any, does zone scene technology
19 have with respect to media content streaming apps, such as
20 Google's You Tube Music app or the Spotify app?

21 **A.** Sure. It's always been a challenge to get streaming apps
22 like Spotify to understand the multiroom grouping capabilities
23 that we are talking about because they are built for phones,
24 which don't have multiroom grouping capabilities.

25 And so one of the advantages of zone scene or saved group

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1 technology is that you can expose those apps to multizone
2 groups without the apps having to become a lot more complicated
3 because if the app can simply display a list, you know, like
4 upstairs or morning or something like that, that's enough to
5 allow that app to pick something from that list and play to
6 those groups; whereas, if the app was a required to implement
7 dynamic grouping, then they would have to worry about the
8 complexity of not just targeting the group but also picking the
9 membership of the group. And we found that was more complexity
10 than a lot of these app companies wanted to take on, and so it
11 serves as a great bridge between the multiroom functionality of
12 Sonos and the -- the capabilities of those music applications.

13 **Q.** Now, what importance, if any, does zone scene technology
14 have with respect to voice assistance?

15 **A.** It's extremely important to voice assistance. And the
16 reason why is because in a voice assistant it's incredibly
17 cumbersome to say something like "Play Beatles in living room
18 and dining room and kitchen and entryway and patio." You want
19 to say, "Play Beatles downstairs." And so as voice assistance
20 came into the fold, it became much more important to be able to
21 create these predefined groups of players for later invocation
22 and also to be able to name them, because otherwise you can't
23 summon them from a voice assistant.

24 **MR. SULLIVAN:** Your Honor, I have another physical
25 exhibit. This is Trial Exhibit 8237. May I have permission to

1 hand this to the witness?

2 **THE COURT:** Sure.

3 (Pause in proceedings.)

4 **BY MR. SULLIVAN:**

5 **Q.** Nick, can you tell me what this is?

6 **A.** This is a United States patent 10,469,966B2 invented by
7 Rob Lambourne and dated November 5th, 2019.

8 **Q.** So that's the '966 patent we have been referring to so far
9 in this case?

10 **A.** That is correct, yes.

11 **MR. SULLIVAN:** Your Honor, I would like to move that
12 exhibit into evidence.

13 **MR. LORDGOOEI:** No objection, Your Honor.

14 **THE COURT:** Received in evidence.

15 (Trial Exhibit 8237 received in evidence.)

16 **MR. SULLIVAN:** Thank you, Your Honor.

17 May I approach the witness with another physical exhibit?
18 This one is TX8238.

19 **THE COURT:** Go ahead.

20 (Pause in proceedings.)

21 **BY MR. SULLIVAN:**

22 **Q.** Nick, can you tell me what this document is?

23 **A.** Yes. This is United States patent 10,848,885B2 dated
24 November 24th, 2020, and invented by Rob Lambourne.

25 **MR. SULLIVAN:** Your Honor, I would like to move this

1 exhibit into evidence as well.

2 **MR. LORDGOOEI:** No objection.

3 **THE COURT:** Received in evidence.

4 You may show it to the jury.

5 (Trial Exhibit TX8238 received in evidence.)

6 **MR. SULLIVAN:** Thank you, Your Honor.

7 (Pause in proceedings.)

8 **BY MR. SULLIVAN:**

9 **Q.** Nick, what technology do the '885 and '966 patents cover?

10 **A.** They cover the technology that we have just been talking
11 about, the saved group or zone scene style grouping.

12 **Q.** And I believe you may have mentioned this already, but who
13 is the inventor named on these patents?

14 **A.** The inventor is my colleague, Rob Lambourne.

15 **Q.** Who is --

16 **THE COURT:** I think you need to be a little careful
17 here. That was a general answer and I don't mean to be
18 critical of the witness but the patents cover what's in the
19 claims and the witness' answer was a bit too general.

20 So I'm going to let the answer stand, but those -- in the
21 patent at the end, each one of them says these things are
22 covered and there will be several requirements of the claim,
23 all of which have to be met in order for the patent to be
24 violated.

25 So the statement that it generally covers what we have

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1 been talking about, I don't think that is quite right, so I'm
2 going to give that word of caution to the jury to be careful
3 about what these patents cover. Thank you.

4 Go ahead, Counsel. Let's not do that again.

5 **MR. SULLIVAN:** My apologies, Your Honor.

6 **BY MR. SULLIVAN:**

7 **Q.** Who were Sonos' competitors back in 2005?

8 **A.** Well, at first we didn't really have any products that we
9 would consider serious competitors of ours because there was no
10 other products that were doing things like -- like the
11 ZonePlayer and controller 100 that we launched in 2005.

12 Over time, though, competitors definitely started to
13 emerge. At first it was the traditional audio brands, you
14 know, the Denons, those types of companies that would show up
15 with products similar to Sonos.

16 But then later on, we started to see big technology
17 companies, the Amazons, the Googles, the Apples start showing
18 up in our neighborhood as well.

19 **Q.** Why did those big technology companies want to compete in
20 a multiroom audio space?

21 **A.** There's two reasons --

22 **MR. PAK:** Objection, Your Honor. Calls for
23 speculation.

24 **THE COURT:** Sustained.

25 How could he know why they wanted to do it?

1 Sustained. Calls for speculation.

2 **BY MR. SULLIVAN:**

3 **Q.** Okay. Let me have you turn to -- it's page 51 of TX7200,
4 which has already been admitted into evidence.

5 (Witness examines document.)

6 **THE WITNESS:** Page 51?

7 **MR. SULLIVAN:** Yes, page 51.

8 (Pause in proceedings.)

9 **THE WITNESS:** Okay.

10 **BY MR. SULLIVAN:**

11 **Q.** What is being shown on this page?

12 **A.** This page shows a timeline of a -- I would say the
13 development of the wireless multiroom music systems of
14 different participants.

15 You show -- or, I'm sorry. The document shows Sonos'
16 founding in 2002, Sonos' first public demonstrations, the
17 releasing of the products to the public and then an almost
18 ten-year gap during which there are really not other comparable
19 wireless multiroom sound systems with the capabilities of Sonos
20 before finally in -- just before January 2014, it looks like,
21 the first, you know, direct competitor as we characterized it,
22 Bluesound emerged. They were then followed by Denon, who made
23 a system called Heos, which was a wireless multiroom system
24 that in many -- beared many resemblances to Sonos, in my
25 opinion. And then that was followed by Google, who entered the

1 space with some of their wireless audio products in late 2015,
2 as I recall. Almost, you know, ten years after Sonos' products
3 first made -- were made available to the public.

4 **Q.** Now, before we dive a little deeper into Sonos'
5 competition with Google, was there a time when Sonos and Google
6 worked together?

7 **A.** There was. In addition to the many other things which
8 Google does, they also had a music service called Google Play
9 Music at the time or though -- it's been through several
10 different namings -- and remember, the purpose of Sonos or one
11 of the key purposes, of course, was to play streaming music
12 services from the internet. And so naturally there was an
13 interest in the -- keeping in touch with companies like Google
14 that were developing internet music services with an eye
15 towards making the content that was on those music services
16 available for playback on Sonos.

17 **Q.** How did this collaboration come about?

18 **A.** Well, like I mentioned, we had kept in touch over the
19 years with some Google personnel who were working on the -- on
20 Google's music services.

21 One of the early personnel I remember was a gentleman by
22 the name of Chris Yerga. Chris Yerga had actually applied for
23 a job working for me with Sonos before he ended up working at
24 Google. And when he worked at Google, he was in charge, I
25 think, of certain aspects of the Play Store.

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1 And the Play Store in those days the Google Play Music as
2 its name implies, which was Google's early music service, was
3 an offshoot of the Play Store and the other kind of Play
4 services that Google offered.

5 And so, at the time that Play Music launched, I sent
6 Mr. Yerga a friendly e-mail congratulating him on the launch
7 and complimenting him that the launch had been well received;
8 and he wrote back basically saying that he is a fan of Sonos
9 and he wanted to talk about bringing Sonos and Google together
10 with respect to that music service.

11 **THE COURT:** I'm sorry. Yes, Counsel.

12 **MR. PAK:** Objection. The witness is testifying on
13 hearsay statements that -- there's no document or anything in
14 evidence indicating what anyone may have said.

15 **THE COURT:** What was the original question? Let me
16 ask my reporter. Read back the original question.

17 (Record read.)

18 **THE COURT:** I think the answer was responsive to the
19 question. The objection is overruled. It was turning into a
20 long narrative but I will let that go. Next question.

21 **BY MR. SULLIVAN:**

22 **Q.** Nick, I would like you to turn to TX344 in your binder.

23 **A.** Yes, I'm there.

24 **Q.** Can you tell me what this is?

25 **A.** This is the e-mail I was just talking about between me and

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1 Mr. Yerga.

2 **Q.** So is this an e-mail you sent to Mr. Yerga on May 15,
3 2013, and his reply on July 7, 2013?

4 **A.** Yes. You can see that I mailed Mr. Yerga a
5 congratulations on the launch today on May 15th, 2013,
6 referring to Google Play Music. The only text is user reaction
7 looks great. I'm looking forward to All Access Google Play.
8 All Access was the name of their product. That was the end of
9 the e-mail to me from Mr. Yerga.

10 **MR. SULLIVAN:** Your Honor, I would like to move TX344
11 into evidence.

12 **THE COURT:** Any objection?

13 **MR. LORDGOOEI:** No objection.

14 **THE COURT:** Thank you. Received.

15 (Trial Exhibit TX344 received in evidence.)

16 **BY MR. SULLIVAN:**

17 **Q.** Okay. What was Mr. Yerga's response to your e-mail?

18 **A.** Well, he replied to me, as you can see with a --
19 unprompted with a much longer e-mail and talking about the
20 launch, the Google IO conference at which, you know, that
21 launch was talked about.

22 And then he said, "The two most popular questions I was
23 asked afterwards were about support for IOS, which is Apple's
24 operating system and Sonos," which is us.

25 He said, "Sundar already made a public statement about

1 IOS, and I would love to see Sonos' integration as well. Off
2 the record, we're talking about it internally now and I hope we
3 can begin officially engaging on that front soon."

4 Q. Did Sonos ever meet with Google's engineers?

5 A. Yes, we did.

6 Q. When was that? When was the first time you met?

7 A. Sure. I think the first time was actually, I believe,
8 later that summer.

9 Q. So this would be the summer of 2013; is that right?

10 A. That's correct, yes.

11 Q. Let me have you turn to TX347 in your binder, please.

12 (Witness examines document.)

13 **THE WITNESS:** Okay. Yes, I'm here.

14 **BY MR. SULLIVAN:**

15 Q. Okay. What is this document?

16 A. At a high level this is a document between Kristen Bender,
17 who is a Sonos employee, who I believe worked in the product
18 organization with me at Sonos setting up the meeting, which we
19 were just talking about, at which Google's wish to talk about
20 the possibility of integrating the Google Play Music All Access
21 service with Sonos would be discussed.

22 Q. Now is that your name that's mentioned here in this
23 e-mail?

24 A. Let me see.

25 (Pause in proceedings.)

1 **THE WITNESS:** Yes, if you -- if you look at the very
2 beginning of the -- I don't know if it is the beginning or part
3 of a thread, but one of the things which is being proposed in
4 the e-mail is that I, Nick Millington, VP of product
5 development, would be one of the attendees at the proposed
6 meeting in July of 2013.

7 **MR. SULLIVAN:** Your Honor, we would like to move TX347
8 into evidence.

9 **THE COURT:** Any objection?

10 **MR. LORDGOOEI:** Objection, Your Honor, permission to
11 approach the bench.

12 **THE COURT:** No, sorry. Can we pass this then or do
13 you have to have the answer right now?

14 **MR. SULLIVAN:** We can pass, Your Honor.

15 **THE COURT:** Let's pass it for the moment so that we
16 won't delay the jury and we will come back to it, but go to
17 your next question, please. Thank you.

18 **BY MR. SULLIVAN:**

19 **Q.** What was discussed during this first meeting between Sonos
20 and Google?

21 **A.** Well, as I mentioned before, the topic of the meeting was
22 to make -- that I attended was to make plans for how the Google
23 Play Music All Access service could be made available as a
24 music service that people who owned Sonos could listen to.

25 Remember, Sonos had a rather unique architecture with the

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1 multiroom functionality, the dynamic grouping, the multiple
2 speaker, multiple devices and things like that. And so these
3 partner meetings typically involved a, you know, fairly
4 detailed explanation of how the product worked, how it differed
5 from other things that were out there at the time to ensure
6 that the partner was signed up for the work that would be
7 required on their end and to ensure most importantly that they
8 fully understood the -- the Sonos system that they would be
9 integrating with.

10 **Q.** What anything, if any, did Sonos share with Google?

11 **A.** So, a couple of key pieces of information that we would
12 have shared with Google. One of them would have been we would
13 have sent them --

14 **THE COURT:** Wait, wait, not "would have."

15 **THE WITNESS:** Okay. I'm sorry.

16 **THE COURT:** Whether that --

17 **THE WITNESS:** Okay. Specifically.

18 **THE COURT:** You have got to testify from actual
19 memory, not what somebody has told you would have happened. It
20 has to be your actual memory.

21 **THE WITNESS:** Okay. I apologize. So I remember that
22 the subject matter of this meeting was about bringing the
23 Google Play Music music service to be a service where owners of
24 Sonos could listen to that service on their Sonos system. So
25 the specific things that we shared, one of them would have been

1 actual physical --

2 **THE COURT:** Aha, "would have been?"

3 **THE WITNESS:** I'm sorry. One of them was the actual
4 physical hardware that -- that, you know, Sonos developed. So,
5 for example, the ZonePlayers and the controllers were two
6 things that we shared.

7 Another thing that we shared with them was an API that we
8 call SMAPI, which is the Sonos music API that was used for
9 services like Google Play Music All Access to work with Sonos.
10 So those are the two major artifacts that I recall sharing with
11 them.

12 **THE COURT:** And you were there when that happened?

13 **THE WITNESS:** Right.

14 **THE COURT:** Okay. Next question.

15 **BY MR. SULLIVAN:**

16 **Q.** Who specifically at Google did Sonos ship players to?

17 **A.** The person that I specifically remember sitting here today
18 was an engineer called Debajit Ghosh who was leading -- I think
19 he worked on Google Play Music All Access. In fact, I know he
20 did. He was also working on the Sonos integration that we were
21 talking about.

22 **Q.** All right. Let's turn to TX359 in your binder.

23 (Witness examines document.)

24 **THE WITNESS:** Yes, I'm there.

25 \\\

1 **BY MR. SULLIVAN:**

2 **Q.** Can you tell me what this document is?

3 **A.** This is an e-mail that Kristen Bender, who, again, worked
4 in the same organization that I did working on our
5 partnerships, shared with me at the time; and it was talking
6 about Mr. Ghosh's reaction to assessing the Sonos products that
7 he received following the meeting in July 2013.

8 **MR. SULLIVAN:** Your Honor, we would like to move TX359
9 into evidence.

10 **THE COURT:** Any objection?

11 **MR. LORDGOOEI:** No objection, Your Honor.

12 **THE COURT:** 359 is received.

13 (Trial Exhibit TX359 received in evidence.)

14 **MR. SULLIVAN:** May I publish it to the jury,
15 Your Honor?

16 **THE COURT:** Yes, you may.

17 (Pause in proceedings.)

18 **BY MR. SULLIVAN:**

19 **Q.** Okay. Nick, what is Mr. Ghosh discussing in this e-mail?

20 **A.** He is discussing his experience that he had with the Sonos
21 products that he had received from Sonos in order to plan the
22 integration work that I was talking about between Google Play
23 Music and Sonos to make that music service available on Sonos?

24 And in particular you can see that he is passing along a
25 large amount of positive feedback on the product. And keep in

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1 mind, this is a gentleman who -- not probably -- he definitely
2 sees all the different products that are planning to integrate
3 with Google Play Music. And nonetheless, you know, he is
4 pointing out, you know, things like he was really impressed by
5 the out-of-box experience. He was really impressed by the
6 sound quality. He was impressed by the ease by which he was
7 able to group and ungroup devices, which keep in mind was an
8 extremely uncommon feature if it existed on anything at all at
9 this time in other comparable products. And then he concludes
10 with telling us we have built an incredible product.

11 **Q.** All right. During your Sonos' collaboration with Google,
12 what multiroom audio products did Google have on the market at
13 the time?

14 **A.** They did not have any multiroom audio products on the
15 market that I'm aware of at this time or through the -- through
16 the duration of any of these conversations or even our later
17 collaboration.

18 **Q.** And when did Google launch its first multiroom audio
19 product?

20 **A.** The product I think launched in December of 2015.

21 **Q.** And what was the next multiroom audio product that was
22 launched by Google?

23 **A.** That was the Google Home in October of 2016.

24 **MR. SULLIVAN:** Your Honor, I have a physical exhibit,
25 if I may approach the witness.

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1 **THE COURT:** Please.

2 (Pause in proceedings.)

3 **MR. SULLIVAN:** For the record this is TX458.

4 (Pause in proceedings.)

5 **BY MR. SULLIVAN:**

6 **Q.** Can you tell us what this device is?

7 **A.** Yes, this is the Google Home speaker that launched in
8 October of 2016.

9 **MR. SULLIVAN:** Your Honor, I would like to move TX458
10 into evidence.

11 **MR. LORDGOOEI:** No objection, Your Honor.

12 **THE COURT:** Thank you, received. You may hold it up
13 and let the jury see it.

14 (Trial Exhibit TX458 received in evidence.)

15 **THE WITNESS:** All right.

16 (Pause in proceedings.)

17 **THE COURT:** Is that one of those things that -- you
18 talk to.

19 **THE WITNESS:** I beg your pardon?

20 **THE COURT:** Can it listen to you as well as play music
21 is what I'm asking.

22 **THE WITNESS:** You are asking if this is capable of
23 playing music?

24 **THE COURT:** No. I'm asking -- surely it plays music
25 but can you talk to it as well? I don't know. I don't have

1 one of those things, but can you ask it to do something for
2 you?

3 **THE WITNESS:** In my understanding, yes, this is a
4 voice speaker.

5 **THE COURT:** Okay. All right. Great.

6 **MR. SULLIVAN:** But, Your Honor, it's not plugged in so
7 it's not recording anything right here today, so I think we are
8 safe.

9 **THE COURT:** Good to know.

10 (Laughter.)

11 **MR. SULLIVAN:** Okay. I have another exhibit I would
12 like to hand the witness if I may, Your Honor, physical
13 exhibit.

14 **THE COURT:** Go ahead.

15 (Pause in proceedings.)

16 **MR. SULLIVAN:** For the record, this is marked TX468.

17 (Pause in proceedings.)

18 **BY MR. SULLIVAN:**

19 **Q.** Nick, can you tell us what this device is?

20 **A.** Yes. This is the Sonos Play 1 that launched some time in
21 2014, which is a Sonos speaker designed for multiroom music.

22 **MR. SULLIVAN:** Your Honor, I would like to move TX468
23 into evidence.

24 **MR. LORDGOOEI:** No objection.

25 **THE COURT:** Received.

(Trial Exhibit TX468 received in evidence.)

MR. SULLIVAN: Thank you.

BY MR. SULLIVAN:

Q. Was there any competition -- I'm sorry. Let me ask that again. What Sonos speaker did the Google Home compete with?

A. The Google Home competed with the Sonos Play 1 and a bit later the Sonos 1.

MR. SULLIVAN: Okay. I have another physical exhibit, Your Honor.

(Pause in proceedings.)

MR. SULLIVAN: For the record, this one is marked TX459.

(Pause in proceedings.)

BY MR. SULLIVAN:

Q. Nick, can you tell me what this device is?

A. Yes. This is the Google Home Max, which is another speaker that Google launched.

MR. SULLIVAN: Your Honor, I would like to move into evidence exhibit TX459.

MR. LORDGOOEI: No objection, Your Honor.

THE COURT: Received.

(Trial Exhibit TX459 received in evidence.)

MR. SULLIVAN: Thank you, Your Honor.

BY MR. SULLIVAN:

Q. What Sonos speaker did the Google Home -- I'm sorry. What

1 Sonos speaker did the Google Max compete with?

2 **A.** It competed with the Sonos 5 or Play 5.

3 **MR. SULLIVAN:** One more exhibit, then I promise I'm
4 done, Your Honor, if I may.

5 **THE COURT:** Yep.

6 (Pause in proceedings.)

7 **MR. SULLIVAN:** For the record this has been marked as
8 Trial Exhibit 467.

9 (Pause in proceedings.)

10 **BY MR. SULLIVAN:**

11 **Q.** Nick, can you tell me what this device is?

12 **A.** This is the Sonos Play 5.

13 **MR. SULLIVAN:** Thank you, Your Honor. I will pass the
14 witness.

15 **THE COURT:** Well, wait. Did you move 467 in?

16 **MR. SULLIVAN:** Oh.

17 **THE COURT:** I don't think you did.

18 **MR. SULLIVAN:** Great reminder, Your Honor. Thank you
19 very much. I would like to move 467 into evidence.

20 **MR. LORDGOOEI:** No objection, Your Honor.

21 **THE COURT:** Thank you. Received in evidence and
22 cross-examination.

23 (Trial Exhibit TX467 received in evidence.)

24 **THE COURT:** Before we start, can my jury continue on?
25 If you need a restroom break at any time or any other kind of a

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1 break, raise your hand and we will accommodate you. No one
2 seems to be raising your hand so we will just push ahead.
3 Thank you.

4 All right. Cross-examination.

5 **MR. PAK:** Thank you, Your Honor, this is Sean Pak. My
6 partner -- can we --

7 **THE COURT:** This is agreed upon?

8 **MR. PAK:** Yes, Your Honor. This is the timeline.

9 **THE COURT:** All right. Put that up and let me explain
10 to the jury what we are dealing with here. Come up here and
11 get it set up. Your time is running. We have time limits,
12 ladies and gentlemen. And if they use up their time, that's
13 it. That's over.

14 Now can you all see? Do you have super vision like in
15 superman? Do you have super vision? Can you see that far? I
16 can't see it myself, but you-all probably have good eyesight.

17 Okay. This is very important. This is a stipulated to
18 agreed upon timeline of some dates, not every important date
19 because that would be too much, but some dates up there that
20 will -- is meant to help you, the jury, keep track of the
21 evidence.

22 And so this -- I'm glad the lawyers did this and they both
23 agreed to it. It is a very helpful thing I have found in other
24 cases to allow the jury to grasp a timeline in where evidence
25 and testimony fits within the overall story. So there we go.

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1 This is agreed to and stipulated to, so it is evidence in the
2 case, correct, Counsel?

3 **MR. PAK:** Yes, Your Honor.

4 **MR. SULLIVAN:** Yes, Your Honor.

5 **THE COURT:** All right. Very good. Thank you.

6 Cross-examination.

7 **CROSS-EXAMINATION**

8 **BY MR. LORDGOOEI:**

9 **Q.** Hello, Mr. Millington.

10 **A.** Hello.

11 **Q.** Now, you mentioned you joined Sonos in 2003; correct?

12 **A.** In April of 2003, yes, that's correct.

13 **Q.** You began working on the audio synchronization issues and
14 dynamic grouping issues at that time; correct?

15 **A.** Yes, that's correct.

16 **Q.** Now, let's put up TX6975 from the Plaintiff's exhibits.

17 **THE COURT:** 6975 already in evidence.

18 (Witness examines document.)

19 **BY MR. LORDGOOEI**

20 **Q.** This was a document that your Counsel displayed. This is
21 a functional specification for a ZonePlayer; correct?

22 **A.** That's what it is titled, correct.

23 **Q.** And this was implemented, this functional specification;
24 correct?

25 **A.** No, not in its entirety.

1 **MR. LORDGOOEI:** Okay. We can take that down.

2 **BY MR. LORDGOOEI:**

3 **Q.** The physical ZonePlayer that your Counsel brought in, that
4 was sold commercially you indicated; correct, sir?

5 **A.** You are talking about the ZonePlayer 100 that we had
6 earlier, not these; is that correct?

7 **Q.** That's correct.

8 **A.** Okay. Yes. The original ZonePlayer 100 was made
9 available for commercial sale in January of 2005.

10 **Q.** Now, the patents that your Counsel displayed to you, the
11 '966 patent and the '885 patent, you understand that those were
12 filed based on a September 12th, 2006, provisional filing date.
13 You understand that, yes, sir?

14 **A.** Yes, that's correct.

15 **Q.** So you are not telling the jury that the -- you are not
16 disputing the fact that the Sonos 2005 system, the ZonePlayer
17 100 and the controller 100, that those are not prior art?

18 **THE COURT:** That's too many double negatives.

19 **MR. LORDGOOEI:** I apologize, Your Honor.

20 **THE COURT:** Please ask it again in a different way.

21 Ask it in the positive. Just say "were they prior art."

22 **BY MR. LORDGOOEI:**

23 **Q.** You agree, sir, that the ZonePlayer 100 and the controller
24 100 products that Sonos released by January 2005, those qualify
25 as prior art to the '885 and '966 patents; correct?

1 **MR. SULLIVAN:** Objection, Your Honor. He is not a
2 patent expert. He doesn't know what qualifies as prior art.
3 He is just a fact witness.

4 **THE COURT:** Well, he has gotten pretty close to being
5 a patent expert, so I'm going to allow the question on -- now,
6 if you truly cannot understand what's being asked, then you say
7 that that would -- but based on what you have said so far, you
8 seem to know a lot about patents, so I'm going to allow the
9 question.

10 **THE WITNESS:** Would you kindly repeat the question,
11 please?

12 **BY MR. LORDGOOEI:**

13 **Q.** Sure. You agree, sir, that the ZonePlayer 100 and the
14 controller 100 products that were part of the 2005 system
15 released by Sonos in January 2005, those qualify as prior art
16 to the '885 and '966 patents; correct?

17 **A.** With the caveat that I'm not an expert in all of these
18 things. Those products were available publicly for inspection
19 in January of 2005, which, I believe, based on my understanding
20 and having watched the patent video, like everyone else, makes
21 them prior art.

22 **Q.** Not only were they available for public inspection, they
23 were available for public sale; correct?

24 **A.** In January 2005, yes, they were for sale.

25 **Q.** Now, I would like to introduce an exhibit, TX62. And do

1 you have a binder of exhibits with you, Mr. Millington?

2 **A.** I do.

3 **Q.** Can you turn to TX62, please.

4 (Witness examines document.)

5 **THE COURT:** Now, that's not yet in evidence, is it?

6 **MR. LORDGOOEI:** Not yet.

7 **THE COURT:** Okay.

8 (Pause in proceedings.)

9 **MR. LORDGOOEI:** Okay. Yes, I have what appears to be
10 TX62 and TX63.

11 (Discussion held off the record.)

12 **BY MR. LORDGOOEI**

13 **Q.** If you could turn to TX62, what is this document?

14 (No response.)

15 **THE WITNESS:** I'm sorry. That's supposed to be in
16 this binder?

17 **BY MR. LORDGOOEI:**

18 **Q.** Let me hand you the binder.

19 **MR. LORDGOOEI:** May I approach the witness,
20 Your Honor?

21 **THE COURT:** You may you can use mine if you are short
22 of copies.

23 **MR. LORDGOOEI:** We will be okay.

24 **BY MR. LORDGOOEI:**

25 **Q.** If you can turn now to the tab TX62 in the binder and let

1 me know when you are there.

2 **A.** Yes, I'm on the first page of TX62, 1 of 63.

3 **Q.** Now, this is a Sonos user guide; correct, sir?

4 **A.** Yes, that is correct, dated April 2005.

5 **Q.** You recognize this document?

6 **A.** I have seen this document or other versions of it before,
7 yes.

8 **MR. LORDGOOEI:** If I may move that into evidence,
9 Your Honor.

10 **THE COURT:** Any objection?

11 **MR. SULLIVAN:** Your Honor, my only objection, this
12 appears to be half of the user manual. I don't know why they
13 would try to introduce half of the user manual.

14 **MR. LORDGOOEI:** So that may just be inadvertent
15 numbering. TX63 is the other half, and we are happy to
16 introduce them both together.

17 **THE COURT:** All right. Subject to that, No. 62 is
18 received in evidence.

19 Now there is a confusing thing. It also says on the front
20 Exhibit 1077. You know, is that from some deposition number or
21 what is that?

22 **MR. LORDGOOEI:** I believe so, Your Honor.

23 **THE COURT:** All right that is not the -- 1077 should
24 be disregarded and the official Trial Exhibit Number is 62.
25 All right. 62 received in evidence and you have got to follow

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1 up and introduce the other half.

2 **MR. LORDGOOEI:** Yes, Your Honor.

3 **THE COURT:** Go ahead.

4 (Trial Exhibit 62 received in evidence.

5 **BY MR. LORDGOOEI:**

6 **Q.** Mr. Millington, if you could turn to TX63 as well.

7 **THE COURT:** I don't have that one.

8 **THE WITNESS:** TX63?

9 **MR. LORDGOOEI:** That's right.

10 **THE COURT:** Is that the other half?

11 **THE WITNESS:** I'm sorry. I'm just confused here. It
12 says Exhibit 1078.

13 **THE COURT:** No. 1078 you got to disregard it.

14 **THE WITNESS:** Okay.

15 **THE COURT:** And you go with what's up here where it
16 says 63.

17 **THE WITNESS:** Okay.

18 **THE COURT:** The yellow thing which your eye
19 immediately goes to because of the different color, you are
20 correct to do that, that's the human instinct; but the lawyers
21 got involved and then they didn't fix this problem. And so now
22 we have got a confusing thing with 1077 and 1078, but I'm
23 telling you disregard those numbers and go with the one that's
24 in black and white, Trial Exhibit 63. It's not your fault.

25 **THE WITNESS:** Okay.

1 **THE COURT:** I'm going to let 63 into evidence to save
2 time unless I hear an objection.

3 **MR. SULLIVAN:** No objection, Your Honor.

4 **THE COURT:** Received in evidence.

5 (Trial Exhibit 63 received in evidence.)

6 **THE WITNESS:** I apologize, sir. I am to take these as
7 two halves of the same document?

8 **THE COURT:** I think that's correct.

9 **MR. LORDGOOEI:** That's correct.

10 **THE COURT:** I don't know why they did it that way.
11 Counsel, come on, get to your point.

12 **MR. LORDGOOEI:** Thank you, Your Honor.

13 **BY MR. LORDGOOEI:**

14 **Q.** You don't have any reason to doubt that this is a Sonos
15 user guide from the April 2005 timeframe; correct, sir?

16 **THE COURT:** If you ask a question like that, he is
17 entitled to take a lot of time to look and see. Do you really
18 want him to do that? I think we all agree what this is. Ask
19 the question that you really care about.

20 **MR. LORDGOOEI:** Understood, Your Honor. Withdrawn.

21 **BY MR. LORDGOOEI:**

22 **Q.** Now, if you can turn to page 6 of TX63.

23 **THE COURT:** Page what?

24 **MR. LORDGOOEI:** Page 6, Your Honor.

25 **THE COURT:** All right.

1 **THE WITNESS:** Okay. I'm on page 6 of --

2 **MR. LORDGOOEI:** I apologize, Your Honor, page 6 of
3 TX62.

4 **BY MR. LORDGOOEI:**

5 **Q.** Mr. Millington, let me know when you are there.

6 **THE COURT:** Page 6 of Number 62, okay.

7 (Pause in proceedings.)

8 **THE COURT:** All right. I think the jury has got it on
9 the screen. Okay. What's your question?

10 **BY MR. LORDGOOEI:**

11 **Q.** Mr. Millington, this page shows the Sonos 2005 system with
12 one ZonePlayer connected to the user's home network and three
13 ZonePlayers wirelessly connected to one another; correct?

14 **A.** I would say one player is connected to the router, which
15 is part of the home network; but with that clarification, yes,
16 it's showing four ZonePlayers, one of which is connected to the
17 router and the others which are operating wirelessly.

18 **Q.** And there's also a controller that's shown wirelessly
19 communicating with a ZonePlayer; correct?

20 **A.** Yes, that's correct.

21 **Q.** So the CR100 controller was capable of serving as a
22 controller for a playback system with at least three
23 ZonePlayers; correct, sir?

24 **A.** Yes, the CR100 could control a Sonos system with three
25 players.

1 Q. And these Sonos players were playing music or capable of
2 playing music synchronously; correct, sir?

3 A. If you had several Sonos players, they could all or any
4 subset of them could play synchronously, yeah, that's correct.

5 Q. So that was a problem that you had helped solve by the
6 time these products were released in January of 2005; correct?

7 A. I think the patents have -- some of them have me alone on
8 them and others have Mr. Lambourne on them as well; but
9 correct, I helped.

10 MR. LORDGOOEI: Your Honor, move to strike that
11 answer. I didn't ask about patents.

12 THE COURT: I'm sorry. I think you are correct, but
13 read to me the question, please, Madam Reporter.

14 (Record read.)

15 THE COURT: He is not asking about the patents. He is
16 asking about what led up to that -- to this user manual. So,
17 please answer the question.

18 THE WITNESS: Correct. I helped to solve the problem
19 of synchronizing Sonos players as it worked in the 2005 system.

20 BY MR. LORDGOOEI:

21 Q. And, in fact, you testified earlier that the Sonos 2005
22 system could, in fact, play music synchronously; correct?

23 A. Yeah, that's correct. If you had two players, they could,
24 for example, be made to play in sync.

25 THE COURT: What if you had three or four, would they

1 all play synchronously?

2 **THE WITNESS:** It would depend on how the user had
3 grouped them, but that was a capability that existed in the
4 system, yes.

5 **THE COURT:** Next question.

6 **BY MR. LORDGOOEI:**

7 **Q.** So grouping those speakers was also a capability in that
8 Sonos 2005 system; correct?

9 **A.** Correct. In the 2005 system it was possible to group
10 players for the purpose of synchronized playback.

11 **Q.** Now, if you could turn to TX63 and page 3 of that
12 document.

13 (Pause in proceedings.)

14 **MR. LORDGOOEI:** Mr. Fisher, if we could zoom in on the
15 figure on that page.

16 **BY MR. LORDGOOEI:**

17 **Q.** Now, the left part of this image shows the CR100
18 controller that was part of the prior art Sonos 2005 system;
19 correct, sir?

20 **A.** Yes, that's correct.

21 **Q.** The CR100 included what was called a zones button;
22 correct?

23 **A.** Correct, there is a button labeled zones on the CR100.

24 **Q.** And tapping a zone button brought up what was called a
25 zone menu; correct, sir?

1 A. Yes, that's correct.

2 Q. So here on this page we see that the zone menu includes
3 three ZonePlayers; correct?

4 A. Yes, that is correct.

5 Q. One of the ZonePlayers we see is called garden. Another
6 is called kitchen and the third is called media room; correct?

7 A. Yes, that is correct.

8 MR. LORDGOOEI: Now, if we could turn to the next
9 page. Mr. Fisher, if you wouldn't mind blowing up the image on
10 the top part of this screen.

11 BY MR. LORDGOOEI:

12 Q. Now, the zone menu in the Sonos 2005 prior art system
13 included a link zone button as well; correct?

14 A. That was a software button on the screen. Unlike the zone
15 button, it was a physical button on the device; but, yes,
16 that's correct. That UI could appear in certain circumstances.

17 Q. So a user could touch the link zone button on the screen
18 and select a ZonePlayer to add to a group; correct?

19 A. The way that I think of it working is that one of the
20 ZonePlayers is already selected on the screen, and then the
21 user presses the link zone button, which allows them to group a
22 second player with the selected player.

23 Q. That's right. And the menu that you see on the right
24 gives the user the option of which other ZonePlayers to group
25 with the selected ZonePlayer; correct?

1 **A.** I believe you could only select one item from this menu at
2 a time. So when you said "ZonePlayers," you can't select more
3 than one item at a time. But with that clarification, I would
4 agree with you; that that's -- you were using this menu to
5 select the player that would be linked with the player that you
6 had highlighted on the zone menu.

7 **Q.** But you also see an option that the users of the Sonos
8 2005 prior art system had, which is called All Zones-Party
9 Mode. Do you see that?

10 **A.** Yes, I see All Zones-Party Mode.

11 **Q.** That's a feature that was available to users of the Sonos
12 2005 prior art system; correct?

13 **A.** That is correct, yes.

14 **Q.** And if a user were to tap All Zones-Party Mode and select
15 that software button, that virtual button, it would result in
16 all of the ZonePlayers in the system being grouped together;
17 correct, sir?

18 **A.** Yes, that's correct. For example, if you had garden
19 selected in the zone menu and then you brought up link zone and
20 then you selected All Zones-Party Mode, that would cause all of
21 the other players, whatever you happen to have in your system,
22 to be linked immediately with garden.

23 **Q.** Now, instead of grouping garden with all the other
24 ZonePlayers that are part of the Sonos system, users of the
25 Sonos 2005 prior art system could also group the garden

1 ZonePlayer, the garden speaker, with the media room, for
2 example; correct?

3 **A.** Correct. If you chose garden and then you brought up link
4 zone and then you chose media room, then what that would result
5 in was a group with garden and media room being immediately
6 invoked.

7 **Q.** And those ZonePlayers would be configured to play back
8 music synchronously at that point; correct?

9 **A.** In the garden and media room example, that's what you're
10 talking about?

11 **Q.** In any grouping in the Sonos 2005 prior art system.

12 **A.** Would you repeat the question, please?

13 **Q.** Sure. So in any grouping in the Sonos 2005 prior art
14 system, the ZonePlayers that were part of that group would be
15 configured to play back music synchronously; correct, sir?

16 **A.** That's correct, yes, as a result of using this menu. I
17 want to be clear. I can't remember if you repeated the whole
18 question or not, sir. Sorry. I was looking at the slide.

19 **THE COURT:** Before you leave this topic, I wasn't
20 clear on an answer. Are you done with this line of questions
21 or --

22 **MR. LORDGOOEI:** I have some more questions about the
23 Party Mode, Your Honor, but I'm --

24 **THE COURT:** Okay. I want to go -- let's -- let's say
25 you have two zones already as a group. Under this manual, can

1 you add a third zone to the group?

2 **THE WITNESS:** Yes, you can although that's not what's
3 being illustrated here because in this illustration all the
4 players are standalone.

5 **THE COURT:** So, what -- explain it in the example here
6 what's being illustrated here.

7 **THE WITNESS:** What's being illustrated on the figure
8 on the screen is how to link garden -- I'm sorry. The figure
9 is actually a little bit misleading because on the left side
10 you see garden selected. On the right side you see select a
11 zone to link with kitchen. So I think there might actually be
12 a small error in our 2005 user manual.

13 But if you ignore that, then what this is trying to
14 illustrate is you pick the standalone player garden, you hit
15 link zone, and then you pick another player that's not garden;
16 and once you select that other player, then you end up with a
17 group consisting of garden and that other player.

18 **THE COURT:** All right. But in addition to that, could
19 you then add yet a third zone?

20 **THE WITNESS:** Yes. Once garden and media room, for
21 example, were linked together, you could go back to the zone
22 menu and you could pick garden and media room; and then you
23 could link in kitchen as well by repeating this same step.

24 **THE COURT:** Okay. That clarifies what I did not
25 understand. All right. Next question.

1 **MR. LORDGOOEI:** Thank you, Your Honor.

2 **BY MR. LORDGOOEI**

3 **Q.** So Your Honor brings up a good point, so let me ask a few
4 more questions on this.

5 Now, Mr. Millington, let's say you were to group the
6 garden ZonePlayer into the All Zones-Party Mode, so now all the
7 speakers in the system are grouped for synchronized playback.
8 Are you with me?

9 **A.** So just so I understand the operations, you select garden
10 in the zone menu. You hit link zone. This pop up shows up and
11 you pick Party Mode. You are asking me about that.

12 **Q.** That's right.

13 **A.** Okay. Go ahead.

14 **Q.** Now, at that point in time, once the user has done that,
15 as we have established, all of the ZonePlayers are now part of
16 the Party Mode; correct?

17 **A.** They are all linked together.

18 **Q.** Okay. Now at that point a user can go and select a
19 particular ZonePlayer to remove from the Party Mode and drop
20 that from the group; correct?

21 **A.** Again, all ZonePlayers have been dynamically linked
22 together. So at that point you are free to go and remove the
23 players, any player you want from the group.

24 **Q.** Okay. And then you would have a new group; correct?

25 **A.** Um, it's -- yeah, it would be a new grouping

1 configuration, yeah.

2 **Q.** And you mentioned grouping configuration. These
3 configurations are actually saved on the ZonePlayers; correct?

4 **A.** As we -- as you might have heard in the opening
5 statements, there are different forms of saving --
6 persistently, not persistently -- but it's certainly true that
7 the -- that ZonePlayers that participate in this have some
8 knowledge of how they are grouped.

9 **THE COURT:** Okay. I don't understand that answer.

10 **THE WITNESS:** Okay.

11 **THE COURT:** Once you have a group worked up on your
12 machine, can you save it for future use as -- under the 2005
13 configuration?

14 **THE WITNESS:** Not for future use, no. All you can do
15 is invoke it immediately.

16 **THE COURT:** What does that mean?

17 **THE WITNESS:** That means that as soon as you select a
18 player on that menu on the right, those two players, for
19 example, are instantly grouped together in that moment. So you
20 can't come back the next day and reapply that group.

21 **THE COURT:** But you can come back ten minutes later
22 while you are still in the same session and reuse it or is it
23 just you -- if you go to something else, you lose it for
24 that -- until you reconfigure it?

25 **THE WITNESS:** I think, as the gentleman pointed out,

1 if you remove another player -- if you remove the player from
2 the group, the group is gone.

3 So, that -- the groups that are created with this
4 mechanism don't hang around across other grouping operations.

5 In contrast with the saved groups that are available, you
6 know, you can reinvoke them at any time when, you know, you
7 choose to reinvoke that group.

8 **THE COURT:** All right. Go ahead, Counsel.

9 **BY MR. LORDGOOEI**

10 **Q.** So, Mr. Millington, this -- one question. You mentioned
11 that in answer to Your Honor's question -- his Honor's
12 questions, you indicated that speakers that are part of a group
13 don't have to play music immediately; correct?

14 **THE COURT:** Wait, say that again. Your voice trailed
15 off, and I -- say it again. He indicated what? Repeat that
16 question.

17 **MR. LORDGOOEI:** Sure. I will ask a different
18 question.

19 **BY MR. LORDGOOEI**

20 **Q.** Now, Mr. Millington, the speakers that are joined as part
21 of a group do not have to play music immediately; correct?

22 **A.** So I just want to clarify that Sonos had no speakers in
23 2005, so I presume what you are talking about is actually the
24 ZonePlayers.

25 **Q.** So let's take a step back. The Sonos product in 2005 was

1 a box that had wires that connect to speakers; correct?

2 **A.** I would characterize it as a networked amplifier, you
3 know, an intelligent device like I have talked about before;
4 but, yes, one of the things which it could do is connect to two
5 speakers over a wire.

6 **Q.** So --

7 **THE COURT:** This may not be clear to the jury --
8 probably it is and I'm just way behind you -- but what -- what
9 I think you are saying is that -- let's say you had the
10 sunroom, you would have a radio receiver in there that you
11 called a controller; is that it? What do you call that thing?

12 **THE WITNESS:** Oh, sorry, so --

13 **THE COURT:** But the speakers themselves could be
14 anybody's speakers. They could be 1940s equipment and plugged
15 in with a banana plug and an RCA plug in the back; right? But
16 the -- these days, 2005, the key thing was the controller in
17 the sunroom; is that right?

18 **THE WITNESS:** Let me see if I can clarify.

19 So, imagine that sunroom is one of the rooms in your house
20 alongside the living room and dining room. That's what you are
21 referring to, right, a room in your house?

22 **THE COURT:** Yeah, yeah.

23 **THE WITNESS:** Okay. So the original 2005 Sonos
24 products, you would put one ZonePlayer in each room where you
25 wanted music. So there would be one ZonePlayer in the sunroom,

1 and there would be one in the living room; there would be one
2 in the dining room.

3 You would connect those ZonePlayers. Each one would be
4 connected to a pair of stereo speakers. So Sonos didn't make
5 speakers. They made these networked amplifiers.

6 And so in your sunroom you would have your pair of
7 speakers from 1940, and in your living room you would have your
8 pair of speakers from 1990. And then the controller is a
9 separate device that you held in your hand that wirelessly
10 communicates with the ZonePlayers.

11 And the user interface that we are looking at here is on
12 the controller, not on the players. Does that help to clarify?

13 **THE COURT:** That helps a lot, yes. But the point --
14 simple point I was trying to make -- and you said it much
15 better -- is that the ZonePlayer is the thing that receives a
16 radio signal in the sunroom, and then there's a hard wire to
17 that are the speakers from 1940.

18 **THE WITNESS:** Correct. In 2005 the speakers were
19 still -- a pair of speakers was wired to each ZonePlayer in the
20 Sonos system, but it was still very different from the
21 traditional AVR because in the case of classic whole home audio
22 systems, you would have all of the speakers in your entire
23 house.

24 **THE COURT:** No. I get it. The little ZonePlayer
25 would save a lot of wiring --

1 **THE WITNESS:** Yes.

2 **THE COURT:** -- because it is receiving a radio signal
3 instead.

4 **THE WITNESS:** Correct.

5 **THE COURT:** Right. And -- but you still have a short
6 wire that goes from the speaker -- the one speaker to the back
7 of the -- right?

8 **THE WITNESS:** Yeah, you are absolutely correct; but,
9 again, it was all in the same room most of the time.

10 **THE COURT:** Right.

11 **THE WITNESS:** You weren't drilling holes or
12 drywalling.

13 **THE COURT:** Right, yeah.

14 **THE WITNESS:** So it was much better in my opinion --

15 **THE COURT:** Of course.

16 **THE WITNESS:** -- than what was there before.

17 **THE COURT:** All right. Next question.

18 **BY MR. LORDGOOEI**

19 **Q.** Mr. Millington, speakers in the Sonos 2005 prior art
20 system that were joined to a group, you indicated, would stay
21 in that group until they were dropped out of the group;
22 correct?

23 **A.** Sonos did not make speakers in 2005.

24 **THE COURT:** Yeah, we got to -- let's -- let's go
25 with -- he is correct about that in 2005, and we are going to

1 confuse the jury if we start calling them Sonos speakers. It's
2 the Sonos' ZonePlayer that we are interested in.

3 **MR. LORDGOOEI:** Okay. Understood, Your Honor.

4 **THE COURT:** Right, so let's rephrase the question.

5 **BY MR. LORDGOOEI:**

6 **Q.** So the Sonos ZonePlayers that were configured as part of a
7 group as part of the Sonos 2005 prior art system, they were
8 configured to play back music as a group at the moment that
9 they were joined to a group; correct?

10 **A.** In the -- yes, in the -- oh, I'm sorry. Could you repeat
11 the question? I was still thinking about speakers. I
12 apologize. Just -- sorry, one more time.

13 **Q.** Sure.

14 **MR. LORDGOOEI:** Actually, if I can have the court
15 reporter read back the question.

16 **THE WITNESS:** Please.

17 (Record read.)

18 **THE WITNESS:** I would say they were configured for
19 synchronized playback. So when you say they were configured to
20 play back music or in sync, it is kind of ambiguous as to
21 whether that means that they were actually playing the music or
22 simply configured to do so. And so that's why I hesitate to
23 give a just a yes/no to your question, sir.

24 **BY MR. LORDGOOEI:**

25 **Q.** Okay. So these ZonePlayers that were part of a group --

1 **A.** Yes.

2 **Q.** -- were configured for synchronous playback; correct?

3 **A.** Correct. As soon as a group has two or more ZonePlayers,
4 those ZonePlayers are configured for synchronous audio playback
5 amongst themselves.

6 **Q.** That doesn't necessarily mean that there's audio coming
7 out of them; correct?

8 **A.** Correct. Like we talked about before, there's a great
9 deal of coordination that has to take place even prior to the
10 first note coming out of the speakers.

11 **Q.** You could start playing -- you could put the ZonePlayers
12 in a group and start playing audio to them five hours later;
13 correct?

14 **A.** That is correct, yes.

15 **Q.** As long as you don't drop any of the ZonePlayers from the
16 group, they stay in the group; correct?

17 **A.** That is correct, yes.

18 **Q.** And you can add and drop as many times as you want the
19 ZonePlayers, but this All Zones-Party Mode will always be
20 available; correct, sir?

21 **A.** In my recollection it's possible that All Zones-Party Mode
22 ceased to be available if all of the speakers were already
23 grouped; but, honestly, I can't remember.

24 **Q.** The All Zones-Party Mode is a hard coded feature in the
25 Sonos 2005 system; correct, sir?

1 **A.** Correct, but it can still have logic about whether it does
2 or doesn't appear.

3 **Q.** The option to activate that mode is hard coded into the
4 Sonos 2005 system; correct, sir?

5 **A.** If you are asking me -- let me make sure that I understand
6 what we mean by "hard coded."

7 When I think of "hard coded," what I think is it is a
8 decision that the developers of the product made when they were
9 writing the code and that the user -- user has no say in it.
10 It is just what the product does. It is hard coded so the user
11 can't change it?

12 So you are correct that a there was a -- you know, a
13 non-user, you know, customizable or changeable or whatever you
14 want to call it, All Zones-Party Mode option that would appear
15 in this zone menu with the one caveat that I can't remember
16 exactly if it disappeared when all the players were already
17 linked or already grouped.

18 **Q.** Thank you for that answer.

19 Now, when a user links two ZonePlayers together in the
20 Sonos prior art system, one of the ZonePlayers receives an
21 indication that it's been added to a group; correct?

22 **A.** Creating a group in the -- yes, in the 2005 system, if you
23 have player A and you are asking player B to be in a group with
24 player A, there will be an indication, a command, an API
25 called, that is sent to player B.

1 Q. All right. So in the prior art system, a ZonePlayer
2 receives a request from a Sonos controller, a CR100, related to
3 forming a zone group; correct?

4 A. Um, a dynamic group as I have described it, but yes.

5 Q. Now that message had a name and it was set, S-E-T-A-V-T --
6 let me rephrase. So that message had a name and it was set
7 AVTransport URI; correct, sir?

8 A. One of the functions of the set AVTransport URI was to
9 instruct a second Sonos player to enter into a dynamic group
10 with a first Sonos player.

11 And I just want to clarify, because we have been talking
12 about names. That name obviously was chosen by the developers,
13 not by the user.

14 Q. You were one of those developers; correct, sir?

15 A. Correct.

16 Q. Did you choose that name?

17 A. I think that the -- that the -- the name had been used in
18 other products before but only in connection with standalone
19 audio playback. So it was I -- I, working at Sonos, who
20 decided to extend the set AVTransport URI operation to be able
21 to handle dynamic grouping as well simple music playback.

22 MR. LORDGOOEI: So now if we could put up a
23 demonstrative, Mr. Fisher. This is DDX2, slide 1.

24 (Pause in proceedings.)

25 MR. LORDGOOEI: Would you, Your Honor, like a copy of

1 the demonstratives?

2 **THE COURT:** No. I see it on the screen.

3 **MR. LORDGOOEI:** Okay.

4 **BY MR. LORDGOOEI:**

5 **Q.** So this slide provides an illustration of the process for
6 this dynamic grouping functionality that you have been
7 referring to; correct?

8 **A.** It's part of a sequence of slides, as I think you will
9 recall from my direct examination; but this slide is the first
10 slide in that sequence.

11 **Q.** And it relates to dynamic grouping; correct?

12 **A.** Yes.

13 **Q.** So in this demonstrative we see that there is a controller
14 labeled CR100; correct?

15 **A.** That is correct, yes.

16 **Q.** And there is a ZonePlayer labeled ZP100 B; correct?

17 **A.** Yes, that is correct.

18 **Q.** And we see, there is a red dashed arrow going from the
19 CR100 to the ZP100 B; correct?

20 **A.** That is correct, yes.

21 **Q.** SO in the dynamic grouping operation this would illustrate
22 the CR100 sending a set AVTransport URI message to ZonePlayer
23 100 B; correct?

24 **A.** I can't recall if we specifically discussed the set
25 AVTransport URI message during my direct testimony.

1 That said, my belief of what the demonstrative was
2 intended to show was indeed the -- the set AVTransport URI
3 message going to ZP100 B as the first step of kind of
4 invoking -- or as a step in invoking that group; but that's
5 what I remember about the demonstrative.

6 Q. This is a demonstrative that you put together; correct,
7 sir?

8 A. Understood, yes.

9 Q. So the request, the set AVTransport URI message, indicates
10 to the ZonePlayer ZP100 B that it should enter into a group
11 with the other ZonePlayer that's illustrated ZP100 A; correct?

12 A. Not necessarily. It can be used for a variety of
13 purposes.

14 Q. In one instance it can be used to tell ZP100 B to enter
15 into a group with ZP100 A. That capability was there; correct,
16 sir?

17 A. So the way that the set AVTransport URI operation works is
18 that it takes a parameter -- and that parameter, you can think
19 of like an URL, like you might enter into your web browser --
20 and what set UV transport URI does -- just like your web
21 browser does different things if you go to CNN.com versus New
22 York Times .com -- the set AVTransport URI operation does
23 different things depending on the parameter.

24 Q. One of the things that it could do is tell ZP100 B to form
25 a group with ZP100 A; correct, sir?

1 **A.** You are talking about the parameter or the operation or
2 some combination?

3 **Q.** Any sort of request, parameter or operation in the set
4 AVTransport URI message?

5 **A.** Sorry. Could you repeat the whole question now that we
6 have clarified some things?

7 **Q.** Sure. You are aware, sir, that there were set AVTransport
8 URI messages that could be sent from the controller, CR100, to
9 the ZonePlayer, ZP100 B, in the prior art Sonos system that
10 would tell the prior art ZP100 B to form a group with another
11 ZonePlayer, ZP100 A; correct?

12 **A.** With the -- again, it would depend on the contents of the
13 parameter. The interesting part in some ways is not the set
14 AVTransport URI but it's --

15 **THE COURT:** Wait. I think he has asked you several
16 times a fair question and you are refusing to answer it.

17 I think it's clear. Can you answer his question? If the
18 answer is no, you don't, then we will move to something else.

19 **THE WITNESS:** Understood. I'm just trying to clarify
20 it for myself.

21 So, yes, one of the ways that -- one of the functions of
22 the set AVTransport URI operation is to instruct ZonePlayer B
23 to enter into a group with ZonePlayer A if the parameter that's
24 in that message states to do that.

25 **THE COURT:** Next question.

1 **BY MR. LORDGOOEI:**

2 **Q.** And that was the capability of the prior art Sonos 2005
3 system; correct, sir?

4 **A.** Yes, that's correct.

5 **MR. LORDGOOEI:** If we can turn to the next slide,
6 DDX2, slide 2.

7 (Pause in proceedings.)

8 **BY MR. LORDGOOEI**

9 **Q.** So in the scenario where the set AVTransport URI message
10 instructs the ZP100 B ZonePlayer to form a group with ZP100 A,
11 here in this illustration we see that that triggers a
12 communication between the two ZonePlayers; is that accurate?

13 **A.** Yes, that's one of the effects of it.

14 **Q.** So one of the parameters that the set AVTransport URI
15 provides to the ZonePlayer ZP100 B is an identification of what
16 are all the other ZonePlayers that you are to form a group
17 with; correct?

18 **A.** Of the set AVTransport URI operation?

19 **Q.** That's right.

20 **A.** No, that is incorrect.

21 **Q.** So the set AVTransport URI indication that gets sent to
22 the ZP100 B instructing it to form a group with ZP100 A, that
23 message includes certain parameters. That was your testimony;
24 correct, sir?

25 **A.** It includes a parameter, yes.

1 Q. In that instance what information is contained within that
2 parameter?

3 A. The ID of the group coordinator of the group that the
4 ZonePlayer 100 B desires to join.

5 Q. And that ID would refer to the ZonePlayer 100 A; correct?

6 A. In this example it would but that wasn't your question.
7 You asked about if the parameter would include all of the other
8 players in the group, and that was what I said was incorrect.

9 Q. So in this particular scenario, the set AVTransport URI
10 instruction to ZP100 B telling it to form a group with the
11 other ZonePlayers, ZP100 A, would contain some ID identifying
12 the ZP100 A; correct?

13 A. In this two-zone system, you are correct.

14 Q. Now let's say we add a third ZonePlayer to this scenario.
15 That same message would get sent to the third ZonePlayer
16 telling it to form a group with ZP100 A; correct?

17 A. That's correct, but the parameter would not include ZP100
18 B.

19 Q. Now, you refer to ZP100 A as the group coordinator in this
20 scenario; correct?

21 A. In the scenario illustrated on the slide, yes, that's the
22 ZP100 A Sonos would refer to in its system -- in its
23 architecture as the group coordinator.

24 Q. The group coordinator has information regarding all of the
25 ZonePlayers that are part of an active group; correct?

1 **A.** Correct, the group coordinator knows the IDs of the
2 members of the group at present.

3 **Q.** So it knows that at present, for example, on part of the
4 Party Mode group which includes and then there will be a list
5 of group ID information for all the other ZonePlayers in the
6 group; correct?

7 **A.** Party Mode is more of an instruction to basically do
8 one-by-one the operation that you have been describing, the set
9 AVTransport URI, against each of the players that are in the
10 system.

11 And so again, the word "Party Mode," you know, it never
12 appears in the memory of the Sonos player.

13 **Q.** That wasn't my question, sir. So let me ask it a little
14 differently.

15 **THE COURT:** Well, you -- in fairness to the witness,
16 you did switch from one-by-one joining up to the group to Party
17 Mode.

18 So you went from, you know, that to Party Mode. So I
19 think the witness' response was responsive to the line of
20 questions. However, go ahead and ask your question again.

21 **MR. LORDGOOEI:** Thank you, Your Honor.

22 **BY MR. LORDGOOEI:**

23 **Q.** So let me ask a slightly different question.

24 The All Zones-Party Mode that we talked about earlier
25 where the user could tap the button and it would link the

1 garden to the media room and the living room, that was a
2 feature that was part of the Sonos 2005 system as we discussed;
3 correct?

4 **A.** That is correct, yes.

5 **Q.** So now, if a user were to activate that All Zones-Party
6 Mode button on their controller, that would also use the set
7 AVTransport URI messages to tell all of the ZonePlayers in the
8 system other than the group coordinator to form a Party Mode
9 group; correct?

10 **A.** Yeah. In fact, the message would -- let me be precise.
11 The message that you are talking about, the set AVTransport
12 URI, would run multiple times. You know, it first tells
13 ZP100 B "make your group coordinator ZP100 A." Then it would
14 tell ZP100 C "make your group coordinator ZP100 A." Then it
15 would take ZonePlayer D "make your group coordinator, you know,
16 ZP100 A."

17 So, it was basically a way to iteratively, you know,
18 repeatedly run that operation, you know, if that makes any
19 sense.

20 **Q.** And at that point all of the ZonePlayers that had received
21 the set AVTransport URI message would communicate with the
22 group coordinator; correct?

23 **A.** Sorry. Repeat the question. I was thinking about
24 controllers and players, please.

25 **Q.** Sure. So at that point --

1 **MR. LORDGOOEI:** Actually, I will have the court
2 reporter read back the question.

3 **THE WITNESS:** Please.
4 (Record read.)

5 **THE WITNESS:** It would be interleaved. So ZonePlayer
6 100 B would contact the group coordinator. Then ZonePlayer C
7 would contact it. Then ZonePlayer 100 D would contact it.

8 So it's not a quite as you described it, but if you -- if
9 you -- if you want to think of it that way, then they were
10 obviously communicating.

11 **BY MR. LORDGOOEI:**

12 **Q.** As we discussed in the smaller scenario where there is
13 only two ZonePlayers, the group coordinator would then collect
14 the information identifying all of the other ZonePlayers in the
15 group; correct?

16 **A.** Again, it's actually the opposite. The ZonePlayer 100 B
17 would tell ZonePlayer 100 A "I want to be a member of your
18 group." So the set AVTransport URI would hit ZonePlayer 100 B
19 saying "join ZonePlayer 100 A's group."

20 And then ZonePlayer 100 B contacts ZonePlayer 100 A using
21 a method called add member, and that's when ZonePlayer 100 A is
22 informed that ZonePlayer 100 B wants to join its group.

23 **Q.** Okay. And my only point, Mr. Millington, was that once
24 those operations are performed, the group coordinator has group
25 ID information for all of the ZonePlayers that are in the

1 group; correct?

2 **A.** It has player ID information for each of the players that
3 are in the group.

4 **Q.** That's right.

5 **A.** I'm not sure what you mean by "group ID." I'm sorry.

6 **Q.** Now --

7 **THE COURT:** So, just -- let's stop on that. So if A
8 is the coordinator and B and C are the only other ones and you
9 are in Party Mode, B would tell A "I want to join;" and A would
10 accommodate. C would tell A, "I want to join," and A would
11 accommodate. And so A would know that B and C are part of the
12 group with A.

13 **THE WITNESS:** Correct.

14 **THE COURT:** Is that all correct?

15 **THE WITNESS:** Correct, yes.

16 **THE COURT:** All right. And then so really it sounds
17 like the only -- the Party Mode is just an automatic way to go
18 to all hands on deck, all ZonePlayers are part of the group and
19 so that you don't have to individually -- individually march
20 through each ZonePlayer in your house. You can just sign them
21 all up in one fell swoop. Is that -- how close -- how close to
22 accurate is that? And, if it's not accurate, explain why.

23 **THE WITNESS:** No. That's correct. It's basically a
24 shortcut to the manual process of adding player B then player C
25 then player D to player A's group.

1 And, in fact, from player A's perspective, Party Mode is
2 indistinguishable from the user manually performing those
3 operations.

4 **THE COURT:** If -- and in the system, just curious, is
5 A always the coordinator or in some circumstances would it wind
6 up being B or C?

7 **THE WITNESS:** The coordinator is the -- so if you
8 recall back to the -- to the other exhibit -- sorry, am I
9 allowed to show you that?

10 **THE COURT:** You can show us whatever you want, but can
11 you --

12 **THE WITNESS:** Yeah. So, basically, if you start
13 standalone, the coordinator is the player that you had selected
14 at the time that you hit link zone. So the coordinator is
15 whatever player you started with and then added --

16 **THE COURT:** Okay. So that could be B or C?

17 **THE WITNESS:** Correct.

18 **THE COURT:** It doesn't have to be A.

19 **THE WITNESS:** Yeah. It depends on what player you had
20 selected in the zone menu at the time that you pressed link
21 zone.

22 **THE COURT:** So that must mean that each of these
23 ZonePlayers are identical except they each have a different
24 name.

25 **THE WITNESS:** And a different ID.

1 **THE COURT:** "Identification" is a better term, yes.

2 **THE WITNESS:** Yeah.

3 **THE COURT:** Okay. So any of them are configured to
4 serve as the coordinator if you start with it as the lead.

5 **THE WITNESS:** Yeah, that's correct, whichever one you
6 start with as the lead becomes the coordinator.

7 **THE COURT:** I got it. All right. Keep going. You
8 got 25 minutes.

9 **BY MR. LORDGOOEI:**

10 **Q.** Now, have you heard of a phrase "zone group topology" in
11 the context of the prior art Sonos 2005 system, Mr. Millington?

12 **A.** Yes, I have heard that term.

13 **Q.** What is that term referring to?

14 **A.** So we -- the prior art that even existed prior to Sonos,
15 one of its disadvantages was that the controller every time it
16 booted up, it would have to go and discover all of the players
17 on the network.

18 So if you had ten players, that process would be a slow
19 operation because it would have to individually find ten
20 players every time you woke up the controller from standby
21 mode.

22 And so one of the things that I introduced in 2005 was the
23 zone group topology service, and you can think of the zone
24 group topology service as kind of a cache which effectively
25 allows the controller to contact only one player to get the --

1 the list of devices that the user owns independent of grouping
2 or anything that we have been talking about today. It is
3 basically a cache that let's the controller quickly learn about
4 the different components of the system.

5 **Q.** And you mentioned that the controller is getting that
6 information from a single ZonePlayer; is that right?

7 **A.** That's correct, but it's kind of an aggregation of
8 information that that player, in turn, collected potentially
9 from elsewhere.

10 **Q.** Okay. So there's -- let me get this straight. There's a
11 ZonePlayer in the system that has this topology information
12 which includes an identification of all the other players in
13 the system; correct?

14 **A.** Every ZonePlayer has that information. So you said "a
15 ZonePlayer." I just want to clarify that every ZonePlayer has
16 its own copy of the zone group topology.

17 **THE COURT:** So every ZonePlayer in the system, which
18 could be, say, a dozen, has the identical list of ZonePlayers
19 in the system?

20 **THE WITNESS:** That's generally correct, yes.

21 **THE COURT:** Okay.

22 **BY MR. LORDGOOEI:**

23 **Q.** So every ZonePlayer in the system has a list of all the
24 other ZonePlayers in the system; correct?

25 **A.** That's one of the things that it has, yes.

1 Q. Okay. And when a new controller joins the system, that
2 controller can grab that information from any ZonePlayer;
3 correct?

4 A. Yeah, that's correct. Any controller can retrieve the
5 list of players in the system from any player in a steady
6 state, you know, where you haven't done something like added a
7 new player and then one microsecond later, you gone in and
8 check.

9 Q. And it sounds like the point of this is so that every time
10 the controller is added to the system, it doesn't have to go
11 out and get information from every single ZonePlayer in order
12 to discover this topology; is that correct?

13 A. No, I wouldn't say that's correct.

14 THE COURT: I got another question while Counsel is
15 thinking. Does this radio communication -- because, you know,
16 it's wireless -- does it go back through some server back at
17 Santa Barbara or does -- it just stays within your house? The
18 radio waves, do they just stay or do they need to go back to
19 some server and be processed somewhere offsite?

20 THE WITNESS: Let me answer your question with
21 reference to this specific scenario just so we are clear what
22 we are talking about. Then I'm happy to answer other
23 questions.

24 So, in the -- in the 2005 prior art system that we are
25 talking about here, the -- in the scenario of grouping players

1 together or in the scenario that we were just talking about of
2 the controller retrieving the list of players, that all takes
3 place internally to the user's home network. There is no
4 connection to a server or the internet or anything along those
5 lines.

6 **THE COURT:** All right. Okay. Thank you.

7 **BY MR. LORDGOOEI:**

8 **Q.** So again to make clear, the information on the ZonePlayer
9 that contains the list of all the other ZonePlayers that are in
10 the system, that is the zone group topology information;
11 correct?

12 **A.** That is my understanding of its main purpose, yes. It is
13 to provide a cache of information about what players are in the
14 system, you know, for the benefit of the controller.

15 **Q.** And that information is stored in flash memory; is that
16 right?

17 **A.** No, that's incorrect.

18 **Q.** Where is it stored on the ZonePlayer?

19 **A.** Um, the -- the topology information is ultimately built
20 from a table that's stored in RAM on the players.

21 **Q.** Now, you mentioned that when you joined the company, the
22 existing speaker systems were -- contained complicated
23 intimidating wires. Do you recall that?

24 **A.** I was talking about multiroom systems. I wasn't saying
25 that speakers in general had that problem but, yes.

1 Q. Multiroom systems included systems that had complicated
2 intimidating wires; correct?

3 A. That's a fair characterization, yes.

4 MR. LORDGOOEI: If we could pull up TX7200 and go to
5 page 48 and this was one of plaintiff's exhibits that's in
6 evidence.

7 (Pause in proceedings.)

8 BY MR. LORDGOOEI:

9 Q. So this was the diagram that Counsel showed you to
10 illustrate what multiroom systems looked like before Sonos; is
11 that right?

12 A. Sorry. I think this was specifically talking about a
13 component that we called the AV receiver.

14 Q. Okay. Well, you were aware of wireless multiroom speaker
15 systems that were available even before Sonos; correct?

16 A. There were -- there were, um, I mean, I honestly don't
17 remember every single system that was out there, but there were
18 some wireless devices for sure.

19 Q. And by the time that you joined Sonos in 2003 and by the
20 time that Sonos released its product in 2005, you were aware
21 that there was a company called Slim Devices; correct?

22 A. So are you asking me if I was aware of Slim Devices in
23 April 2003 or are you asking me when did I become aware of that
24 company? I'm not sure I understand.

25 Q. Well, let me ask when did you become aware of -- well,

1 let's take a step back. Sitting here today, you are aware of a
2 company called Slim Devices; correct?

3 **A.** Correct, I'm aware of Slim Devices.

4 **Q.** And you are aware they released a product called the
5 Squeezebox; correct?

6 **A.** That was not their first product. They had something
7 called the SlimP3 before that; but the Squeezebox was one of
8 their products, yes.

9 **Q.** Now, when did you become aware of Squeezebox and Slim
10 Devices?

11 **A.** Those happened at two separate times. I became aware of
12 Slim Devices, whose product was, as I recall, a single zone
13 product -- they used wired ethernet -- around the same time
14 that I joined Sonos; and I can't remember when I became aware
15 of their second generation Squeezebox product.

16 **Q.** Now, during your tenure at Sonos, you have seen product
17 documentation about the Squeezebox music players; correct?

18 **A.** That's -- that's fair. I can't remember any precise
19 document sitting here today, and I just want to clarify. Are
20 you talking about documents that they wrote, like their user
21 manual or are you talking about documents that we wrote?

22 **Q.** Referring to any documents regarding the Slim Devices'
23 Squeezebox music players that was publicly available?

24 **A.** It's possible. I can't remember where or when I was
25 exposed to those.

1 Q. So I would like to read back a question and answer from
2 your September 29th, 2020, deposition at page 146, lines 12 to
3 15.

4 THE COURT: All right. Read it exactly.

5 MR. LORDGOOEI: (As read:) "QUESTION: You have seen
6 product documentation at a minimum about the Slim Devices
7 Squeezebox music players during your tenure at Sonos; correct?"

8 "ANSWER: I believe that's true, yes."

9 THE COURT: All right. Now, even though it is the
10 lawyer talking, when he reads it back exactly, that counts as
11 evidence. And this is the way we allow prior deposition
12 testimony to be admitted into evidence.

13 The witness was deposed at some point earlier, meaning his
14 deposition was taken and he gave that question and he gave that
15 answer under oath. Yes, sir?

16 MR. SULLIVAN: I have an objection. I don't know why
17 this deposition testimony is being used. It's not impeachment
18 evidence. I don't -- I think his answer was consistent with
19 that.

20 THE COURT: Well, doesn't he work for the company?
21 Doesn't he work for Sonos?

22 MR. SULLIVAN: He works for Sonos, yes.

23 THE COURT: All right. It doesn't have to be
24 inconsistent. Under Rule 32(a) it can be used for, quote, any
25 purpose. He is a party witness. Objection overruled. All

1 right. So, next question.

2 **BY MR. LORDGOOEI:**

3 **Q.** Mr. Millington, you analyzed the Squeezebox device at some
4 point in your tenure at Sonos; correct?

5 **A.** I -- I was aware of it. I'm not sure what level of
6 analysis I can perform sitting here today. That said, I'm
7 certainly aware of the device.

8 **Q.** At some point during your time at Sonos you have looked at
9 the Squeezebox device; correct?

10 **A.** That is fair, yes.

11 **Q.** You understand that the Squeezebox player was a wireless
12 music player and released prior to the Sonos 2005 system;
13 correct?

14 **A.** I know that's true of the SlimP3. I can't remember the
15 Squeezebox, but I think you are correct, yes. I can't remember
16 the date on the Squeezebox. Let me be clear, I remember the
17 product.

18 **Q.** And you understand, sir, that the Squeezebox is a wireless
19 music player; correct?

20 **A.** That is correct. The Squeezebox has wireless
21 capabilities.

22 **Q.** Now, at the risk of potentially confusing the jury, I want
23 to backtrack a little bit and ask you some more questions about
24 the zone group functionality.

25 **A.** Okay. With reference to the Squeezebox or just in

1 general?

2 Q. With reference to the prior art Sonos 2005 system.

3 A. Okay, okay.

4 Q. So, change your frame of mind and I will ask the question.
5 How did the ZonePlayer send the group topology information to
6 the controller? So -- strike that.

7 Let me take a step back. We were talking about the group
8 topology information that was sent --

9 A. The zone group topology?

10 Q. The zone group topology information that was sent from any
11 ZonePlayer to a controller indicating here are all of the list
12 of players that are in the system. Do you recall that?

13 A. Yes.

14 Q. Did I phrase that accurately?

15 A. Yes.

16 Q. Okay. Now, how did that information, that zone group
17 topology information, get sent to a controller?

18 A. Through the wireless network.

19 THE COURT: In the home. Not through the server in
20 Santa Barbara but just the local network; correct?

21 THE WITNESS: Correct. Over the local area network it
22 was sent.

23 BY MR. LORDGOOEI:

24 Q. And in what format was it sent?

25 A. XML.

1 Q. XML is a file; is that right?

2 A. No, it doesn't have to be.

3 Q. But in this instance was it a file?

4 A. No, it wasn't a file, depending -- I mean, how you define
5 file, I guess, but, no, when I hear the word "file," I think of
6 disks and, no, that's not how it works.

7 Q. So, can you explain how the zone group topology
8 information was transmitted in XML format from any ZonePlayer
9 to any controller?

10 A. There was a table in memory of the players that was used
11 on the fly to generate the XML document.

12 Q. Okay. So there was a table in memory that stored that
13 information on the ZonePlayer; correct?

14 A. The list of players in the system, is that what you are
15 asking about?

16 Q. So there was a table in memory on the ZonePlayer that
17 contained the zone group information; correct?

18 A. It was not contained in the -- in the XML format. So it
19 was not a file in memory if that's what you are asking.

20 Q. Your testimony, sir, if I understood it was that the zone
21 group topology information is stored in a table in memory on
22 each ZonePlayer; is that correct?

23 A. That's correct, yes.

24 Q. And when it transmits that information to the controller,
25 it reads that memory -- strike that.

1 When it transmits the information to the controller, it
2 reads that information from the table and memory; formats it
3 into XML format; and sends it wirelessly to the controller; is
4 that correct?

5 **A.** With what you added about it, you know, a separate step of
6 transforming the table and memory into the actual XML data that
7 gets sent over the network, I agree with that now.

8 **Q.** Now, these ZonePlayers and controllers in the prior art
9 Sonos system, they had processors; correct?

10 **A.** Correct. As I explained before, they were intelligent
11 network devices that included processors, both the controllers
12 and the players.

13 **Q.** They had memory; correct?

14 **A.** They had RAM, yes.

15 **Q.** For example, they could store the zone group topology
16 information in memory; correct?

17 **A.** They could store the table that was used to build that
18 information in -- that was sent at XML. That's correct.

19 **Q.** Now, they also had programming instructions on them,
20 correct?

21 **THE COURT:** "They" being what? "They" is what?

22 **MR. LORDGOOEI:** Fair enough, Your Honor.

23 **BY MR. LORDGOOEI:**

24 **Q.** Each of the ZonePlayers had programming information on
25 them; correct?

1 **A.** Correct, they contained the software code.

2 **Q.** Controller as well had programming instructions on it;
3 correct?

4 **A.** Yes, that's correct.

5 **Q.** And that code is what told the controller or the
6 ZonePlayer how to operate or what to do under certain
7 circumstances; correct?

8 **A.** In conjunction with commands received from the user, that
9 is correct.

10 **Q.** So, for example, in the prior art Sonos 2005 system, it
11 was the programming instructions on the controller that were
12 responsible for sending the AVTransport URI message, for
13 example; correct?

14 **A.** That is correct, yes.

15 **Q.** Now, you testified about the patents that are at issue in
16 this case. So you are aware that Sonos is asserting the '885
17 and the '966 patents against Google; correct, sir?

18 **A.** That is correct, yes.

19 **Q.** Are you aware, sir, that none of those programming
20 instructions for the Sonos 2005 system were ever considered by
21 the U.S. Patent Office during prosecution of those patents?

22 **A.** Are you asking me -- just to make sure I understand the
23 question, are you asking did the Patent Office ever see the
24 code.

25 **Q.** To the best of your knowledge did the Patent Office ever

1 see that code?

2 **A.** My only knowledge of that is from your opening statement.
3 I don't know what the Patent Office sees and doesn't see.

4 **Q.** Okay. Now, obviously in releasing the Sonos 2005 system,
5 there must have been testing of that system prior to the
6 commercial release; is that correct?

7 **A.** Correct, there was -- yeah, we tested the product before
8 shipping it.

9 **Q.** And at a certain point in February 2005 when it was
10 commercially available, you had a physical product, a physical
11 ZP100 and a physical CR100; correct?

12 **A.** Yes, yes, of course, the physical product existed at the
13 time that we put it on sale.

14 **Q.** Are you aware, sir, that the Patent Office never received
15 a physical ZP100 or CR100 as part of its examination of the
16 '885 and '966 patents?

17 **MR. SULLIVAN:** Your Honor, I have an objection. He is
18 not an inventor on those patents. I don't know how he can know
19 what was submitted to the Patent Office.

20 **THE COURT:** Sustained. You have to rephrase that
21 perhaps, but --

22 **BY MR. LORDGOOEI:**

23 **Q.** Let me ask you this, Mr. Millington, as Sonos' chief
24 innovation officer, are you involved in any of the patent
25 prosecution activities at Sonos?

1 **A.** Again, I -- I'm an inventor on a number of patents but not
2 these --

3 **Q.** That wasn't my question, sir. Move to strike that answer.

4 **A.** Okay. So you asked me am I involved at the most general
5 level. I'm involved at least insofar as I have been an
6 inventor on a patent.

7 **Q.** Now, were you involved in the prosecution of the '885 or
8 the '966 patents that are at issue in this case?

9 **A.** Sitting here today, I don't recall being involved; but I
10 can't tell you with certainty that I was not involved.

11 **Q.** Sir, are you aware of what the Patent Office considered
12 and did not consider as part of its prosecution as part of
13 those patents?

14 **A.** I know that information as part of the public record, but
15 I have not reviewed it.

16 **Q.** Now, you understand, sir, that all of the features that we
17 have been talking about so far, those are all available as part
18 of the prior art Sonos 2005 system; correct?

19 **A.** Yes, the conversation that we have been having I think is
20 centered on the 2005 prior art system.

21 **Q.** Now, you are not contending that Sonos implemented the
22 functionality that's at issue in the '885 and '966 patents at
23 any time before 2020; correct?

24 **A.** If you define "implementing" as shipping it in a
25 commercial product, then correct, I'm not aware -- I honestly

1 don't know when Mr. Lambourne began his implementation.

2 **Q.** Now, your Counsel showed you an exhibit containing a
3 change log all of the revisions and modifications to the Sonos
4 product dating back to 2005. Do you recall that?

5 **A.** Yes, I recall that at a general level. I can't remember
6 the exhibit number, but I'm sure you are going to tell me.

7 **Q.** So the exhibit number is TX6730. It's already in evidence
8 if you can pull it up.

9 (Pause in proceedings.)

10 **THE WITNESS:** Yes, sir. I have it in front of me.

11 **BY MR. LORDGOOEI:**

12 **Q.** So I believe your testimony was that the zone scenes
13 technology was not implemented until some time in 2020. Did I
14 get that right?

15 **A.** I'm trying to remember if I said it was implemented or if
16 it shipped in a commercial product because those two are
17 different things. What I definitely would have said is that it
18 first -- the Sonos save group functionality or zone scenes
19 functionality was first made available to commercial customers
20 in our S2 release in 2020.

21 **Q.** Okay. And which release is that in Exhibit TX6730? Can
22 you identify it for us in this exhibit?

23 **THE WITNESS:** One moment, please. The exhibit has 26
24 pages, so I'm going to thumb through it.

25 (Pause in proceedings.)

1 **THE WITNESS:** Let me tell you how I'm going to answer
2 and then answer.

3 So starting on page 2, there's a table. And if you look
4 at the fourth column in that table, there's a build software
5 generation column and you start to see S2 showing up in that
6 column on the second page -- your AV person is close to it --
7 it looks like V12.0.

8 So based on my knowledge that Sonos introduced its zone
9 scene grouping in the S2 release and based on the -- on the
10 fact that this is first time that S2 appears in the build
11 software generation, my conclusion sitting here today would be
12 that release is the one where it first appeared. Is that fair?

13 **THE COURT:** Time to -- it's 1:00 o'clock.

14 **MR. LORDGOOEI:** We can continue tomorrow, Your Honor.

15 **THE COURT:** All right. Let's -- we are going to break
16 now at 1:00 o'clock but remember the admonition. No talking
17 about the case, please; no internet research about anything
18 having to do with the case. Keep an open mind. We will start
19 again tomorrow just like we did today. Please be here by 7:45.
20 Thank you and have a good day. Safe journey home.

21 **THE CLERK:** All rise for the jury.

22 (Proceedings were heard outside the presence of the jury:)

23 **THE COURT:** Okay. The witness can step down. There
24 was an issue about Exhibit 347, which Mr. Sullivan was good
25 enough to bypass. Is there still an objection to 347?

1 **MR. PAK:** No, Your Honor.

2 **THE COURT:** 347 will be received in evidence.

3 (Trial Exhibit 347 received in evidence.)

4 **MR. PAK:** Your Honor, just -- I would like to request
5 a clarification that witnesses --

6 **THE COURT:** Be seated, please.

7 **MR. PAK:** -- that witnesses who are still on the stand
8 may not communicate about the substance of their testimony
9 during --

10 **THE COURT:** All right. I didn't say that at the final
11 pretrial conference, but that's what I do say in every trial.
12 And any objection to that; that, in other words, you can't talk
13 to this witness. He is still on cross-examination.

14 **MR. SULLIVAN:** No objection at all, Your Honor. We
15 understand.

16 **THE COURT:** All right. It works both ways.

17 **MR. PAK:** Thank you, Your Honor.

18 **THE COURT:** Any time he is on cross-examination, no
19 talking to the witness about the substance of their testimony.

20 **MR. PAK:** Thank you.

21 **MS. CARIDIS:** Alyssa Caridis on behalf of Sonos.

22 Your Honor, the parties put together a binder of the most
23 important exhibits in the case pursuant to your standing order.
24 Would you like us to pass those up now?

25 **THE COURT:** For me or --

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1 **MS. CARIDIS:** For you, Your Honor.

2 **THE COURT:** Okay. Sure you can give me that, thank
3 you. All right. Any other issues that I need to rule on right
4 now or that you still have hanging fire?

5 **MS. BAILY:** Not sure it will come up. I just wanted
6 to revisit the issue we started on this morning regarding
7 TX8235. I apologize. Melissa Baily for Google.

8 **THE COURT:** All right. Now, who is going to be the
9 sponsoring witness for this?

10 **MS. BAILY:** It is a Sonos exhibit.

11 **MS. CARIDIS:** It will be Rob Lambourne.

12 **THE COURT:** All right. What is your problem with this
13 document?

14 **MS. BAILY:** The only issue, Your Honor, is that it
15 wasn't provided in discovery in response to our request --

16 **THE COURT:** Oh, yes, I remember now. First, let's
17 talk with your disclosures. You were supposed to disclose all
18 the documents that you were going to use at trial under your
19 initial disclosures or with the supplement thereto. Was that
20 ever done?

21 **MR. RICHTER:** Yes. Correct, Your Honor. We
22 supplemented our trial exhibit list in April with this document
23 and gave it to the other side --

24 **THE COURT:** Is the first time you ever disclosed this
25 was with your trial exhibit list?

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1 **MR. RICHTER:** Correct. We supplemented our trial
2 exhibit list to include a document --

3 **THE COURT:** That's not good enough. They are supposed
4 to be able to get this way back when so they can take
5 depositions and know you are going to rely on this thing.
6 That's not good enough.

7 Are you go going to be in the same position, though? I
8 know from past experience Google has made the same mistake.

9 **MR. PAK:** No, Your Honor.

10 **THE COURT:** No what?

11 **MR. PAK:** We will not be relying on any documents that
12 was not produced in discovery.

13 **THE COURT:** Oh, no, not just not produced. See,
14 Google will do the following: You will on a -- make a dump of
15 data three days before the trial and claim that you produced
16 the material. That's not fair either. All right. So tell me
17 what your justification is for a -- a late produced document
18 and wanting to put it into evidence.

19 **MR. RICHTER:** Yes. Thank you, Your Honor. This
20 document relates to user forums three or four years ago where
21 users were requesting -- when there was no zone scene
22 functionality implemented in Sonos' product but users were
23 suggesting, "Hey, you might be able to go out and take a look
24 at IFTTT and that could do that for you."

25 And we're having -- it is not coming in for the truth. We

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1 are having a witness sponsor the document who has seen it and
2 can testify generally to --

3 **THE COURT:** So where does it say that IFTTT could do
4 it for you, or does it say maybe it could do it for you?

5 **MS. BAILY:** It's on the second page, Your Honor,
6 page 2 of 7 original.

7 **MR. RICHTER:** Yes, correct, the second page. I'm just
8 deciding how much, Your Honor, would like me to read in.

9 **THE COURT:** No. I'm reading it. It's near the top.
10 Hang on a minute.

11 (Pause in proceedings.)

12 **THE COURT:** Who is this writing? Who is author of
13 this? Is it Danny? And who is Danny?

14 **MR. RICHTER:** I believe that's correct, Your Honor, a
15 user of the Sonos forums.

16 **THE COURT:** What is smart things, you will know me,
17 Lutron, what are those things? Are they the same as IFTTT?

18 **MR. RICHTER:** Yes, I believe, that's correct,
19 Your Honor. Those are other entities that provide smart home
20 functionality.

21 **MS. BAILY:** Your Honor, I'm not sure what this is
22 coming in for if it is not for the truth of the matter.

23 (Pause in proceedings.)

24 **THE COURT:** (As read:) "I have a schedule to wake me
25 up every more" -- I think he means morning -- "with a few

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1 lights turned on and a music station playing in a couple of
2 rooms at set volumes." So he seems to be saying that he uses
3 IFTT [sic] for that purpose.

4 **MS. BAILY:** Well, actually --

5 **THE COURT:** Is that the only part that's relevant here
6 is that one paragraph?

7 **MR. RICHTER:** I think so, Your Honor, I believe IFTTT
8 is mentioned on the third page as well.

9 **MS. BAILY:** He is actually saying he uses Lutron for
10 that purpose, not IFTTT.

11 **THE COURT:** He does say that.

12 **MS. BAILY:** There is no indication in this document
13 that he has used IFTTT for any purpose relevant to the case.
14 I'm still unclear about what relevance this document has if
15 Sonos isn't trying to get it in for the truth of the matter
16 asserted.

17 **MR. RICHTER:** I mean, I think Google has been telling,
18 Your Honor, that no one has ever used IFTTT or would ever use
19 IFTTT for this purpose. And the fact that a user has suggested
20 it is relevant to that issue. Whether or not someone actually
21 did it is not at issue here.

22 **THE COURT:** Well, but you-all are telling me that the
23 synchronization doesn't work with IFTTT.

24 **MR. RICHTER:** It would be a worse version, yes,
25 technologically comparable but somewhat worse, yes, than the

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1 infringing products.

2 **MS. BAILY:** The point with Mr. Malackowski,
3 Your Honor, is that he never considered whether anyone -- he
4 had no evidence that anyone ever used it because this document
5 came out after expert discovery. They added it to their list.

6 **MR. RICHTER:** That's not quite relevant, Your Honor,
7 but to the extent Google is trying to make it appear relevant,
8 we think in the interest of fairness that this is an exhibit
9 that contradicts that.

10 **MS. BAILY:** So now Mr. Malackowski is going to talk
11 about a document that I couldn't ask him about at his
12 deposition when at his deposition he said he was unaware of
13 anyone --

14 **THE COURT:** Is he the one -- the sponsoring witness
15 for this?

16 **MR. RICHTER:** He is not going to talk about this
17 document on his testimony, Your Honor.

18 **THE COURT:** Who would be the sponsoring witness?

19 **MR. RICHTER:** Mr. Lambourne, Sonos' second witness.

20 **MS. BAILY:** We didn't get to ask him any questions
21 about it either.

22 **THE COURT:** Well, I don't think you should be allowed
23 to use this because you produced it late. You should have
24 produced it sooner. And you -- and it doesn't actually say
25 anyone's ever used IFTTT. The guy says he uses Lutron instead.

1 So I don't know. I think -- I'm going to -- I'm going to
2 say it's out, O-U-T, with the possible exception I will see how
3 the examination goes with -- and the cross-examination.

4 And if I think Google is being unfair to the witness
5 concerning IFTTT, Mr. Malackowski, then I might change my mind
6 and allow it to be used on rebuttal, but that's a long shot. I
7 would say 20 percent chance of that. You would have to be
8 careful how you do your cross.

9 **MS. BAILY:** Understood.

10 **THE COURT:** So Exhibit 8235, objection sustained.

11 **MR. RICHTER:** Does that mean all late adds to the
12 exhibit lists by both parties are no longer in the case?

13 **MS. BAILY:** It wasn't about a late add. It was about
14 adding a document that had never been produced before.

15 **MR. RICHTER:** That was their number one argument; that
16 it was added late and she didn't get a chance to see it.

17 **THE COURT:** I have to rule on each one. But if Google
18 is just as guilty as you are in similar circumstances, I'm
19 going to make the same ruling.

20 You have got to bring it up to me one-by-one, but I'm not
21 going to say that applies across the board. There could be --
22 there could be more probative than -- this document is not very
23 probative. Okay.

24 **MS. BAILY:** Thank you, Your Honor.

25 **THE COURT:** Thank you. Anything else today?

1 **MR. PAK:** No, Your Honor.

2 **MR. SULLIVAN:** No, Your Honor.

3 **THE COURT:** All right. We will see you in the
4 morning. I believe both sides have wasted time. Please do not
5 ask for additional time beyond 14 hours. I think you should
6 both start getting right down to the real issues in the case.
7 Thank you.

8 **MR. PAK:** Thank you, Your Honor.

9 **MR. SULLIVAN:** Thank you, Your Honor.

10 **THE CLERK:** Court is adjourned.

11 (Proceedings adjourned at 1:10 p.m.)

12 ---oOo---

CERTIFICATE OF REPORTER

I certify that the foregoing is a correct transcript
from the record of proceedings in the above-entitled matter.

DATE: Monday, May 8, 2023



Marla F. Knox, CSR No. 14421, RPR, CRR, RMR
United States District Court - Official Reporter